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Search Results -

Term	Documents
KLAPPER-DAVID-G$	0
KLAPPER-DAVID-G.DWPI,EPAB,JPAB,USPT,PGPB.	6
KLAPPER-DAVID-G$.IN..USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	6
(KLAPPER-DAVID-G$.IN.).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	6

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L5

Refine Search

Recall Text | Clear

Search History

DATE: Wednesday, January 22, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND			
L5	Klapper-david-g$.in.	6	L5
L4	(Amb adj a1) same (vector or plasmid)	1	L4
L3	L2 same (vaccine or allergen or allergic)	16	L3
L2	L1 same (vector or plasmid)	61	L2
L1	(Amb adj a1) or (antigen adj E)	582	L1

END OF SEARCH HISTORY

1: Vaccine 2002 Aug 19;20(25-26):3148-54

Related Articles, Links

Gene gun bombardment with gold particles displays a particular Th2-promoting signal that over-rules the Th1-inducing effect of immunostimulatory CpG motifs in DNA vaccines.

Weiss R, Scheiblhofer S, Freund J, Ferreira F, Livey I, Thalhamer J.

Institute of Chemistry and Biochemistry, University of Salzburg, Hellbrunner Street 34, A-5020 Salzburg, Austria.

The mode of administering a DNA vaccine can influence the type of immune response induced by the vaccine. For instance, application of a DNA vaccine by gene gun typically induces a Th2-type reaction, whereas needle inoculation triggers a Th1 response. It has been proposed that the approximately 100-fold difference in the amount of DNA administered by these two methods is the critical factor determining whether a Th1 or a Th2 response is made. To test this hypothesis, BALB/c mice were immunized with two plasmid DNA constructs encoding different proteins (OspC/ZS7 of Borrelia burgdorferi and Bet v 1a, the major birch pollen allergen). Both vaccines were applied by needle and/or by gene gun immunization at the same and at different sites of injection. An analysis of the IgG subclass distribution and measurement of IFN-gamma after antigen-specific lymphoproliferation does not support the widely accepted view that Th2-type immunity induced by gene gun application is solely due to the low amount of injected plasmid DNA thus falling below the critical concentration of CpG motifs necessary for Th1-induction. Furthermore, the data also indicate a strong and even systemic adjuvant effect of the gene gun shot itself. Copyright 2002 Elsevier Science Ltd.

PMID: 12163266 [PubMed - in process]

Entrez PubMed

1: Int Arch Allergy Immunol 2000 Mar;121(3):173-82

Related Articles, Links

KARGER Full Text

Molecular breeding of allergy vaccines and antiallergic cytokines.

Punnonen J.

Maxygen, Redwood City, CA 94063, USA.

PubMed Services

Related Resources

Molecular breeding, also called DNA shuffling, is a technology that enables the generation of large libraries of novel genes and vectors, from which improved variants can be selected based on functional properties. In a common format, it involves recursive recombination and mutation, performed by random fragmentation of related DNA sequences, followed by reassembly of the fragments in a self-priming polymerase chain reaction. As in natural evolution, the technique takes advantage of crossovers, deletions, insertions, inversions and point mutations of genes to generate large pools of related sequences. Molecular breeding can be used to generate improved variants of proteins used as therapeutics, such as vaccine antigens, growth factors and immunomodulatory molecules. Moreover, the technology can be applied to evolve entire viruses or vectors, including DNA vaccines. Cytokines downregulating allergic immune responses and allergens are attractive targets for evolution by molecular breeding. This review describes approaches to generate chimeric allergens with T cell epitopes from multiple allergen homologues, while reducing the recognition by preexisting IgE. In addition, the results and applications of molecular breeding in the evolution of improved antiallergic cytokines are discussed. Copyright 2000 S. Karger AG, Basel

Publication Types:
- Review
- Review, Tutorial

PMID: 10729775 [PubMed - indexed for MEDLINE]

Entrez PubMed

1: Int Arch Allergy Immunol 2001 Jan-Mar;124(1-3):406-10 Related Articles, Links

KARGER Full Text

The influence of CpG motifs on a protein or DNA-based Th2-type immune response against major pollen allergens Bet v 1a, Phl p 2 and Escherichia coli-derived beta-galactosidase.

PubMed Services

Hochreiter R, Hartl A, Freund J, Valenta R, Ferreira F, Thalhamer J.

Institute of Chemistry and Biochemistry, University of Salzburg, Austria.

BACKGROUND: DNA immunization and protein immunization with CpG motifs as adjuvants represent promising approaches in allergen-specific immunotherapy. Objective: We investigated the effect of coinjection or prepriming with CpG-ODN on Th2-type responses induced by gene gun and protein immunization. METHODS: BALB/c mice were immunized with the gene gun using plasmid DNA containing the cDNAs coding for the genes of Bet v 1a, Phl p 2 and beta-galactosidase or with the purified Al(OH)(3)-adsorbed proteins. In addition, CpG-ODN were applied by coinjection or by prepriming treatment. Antibody and cytokine responses were measured by ELISA, proliferative and cytotoxic responses were determined by standard labeling procedures. Furthermore, the allergenic activity of sera was measured by passive cutaneous anaphylaxis. RESULTS: Gene gun immunization and protein immunization induced a clear Th2-type response for all antigens. The Th1-promoting effect of CpG-ODN coinjection together with gene gun immunization was restricted to beta-galactosidase as indicated by the increase of IgG2a and a marked expression of IFN-gamma. CpG motifs also increased the specific cytotoxic response against beta-galactosidase. Prepriming with CpG-ODN and gene gun or protein immunization with Bet v 1a exhibited no significant difference to the non-CpG control group. However, sera from mice preprimed with CpG-ODN induced no anaphylaxis with gene gun immunization, but with protein immunization. CONCLUSIONS: The effect of CpG motifs in vivo depends on a variety of parameters like the nature of the antigen and the immunization modality. Furthermore, our studies indicate that a combination of CpG + DNA immunization may be more effective in antagonizing Th2 responses than the combination of CpG + protein immunization. Copyright 2001 S. Karger AG, Basel

PMID: 11307030 [PubMed - indexed for MEDLINE]

Related Resources

1: Int Arch Allergy Immunol 2002 Jul;128(3):171-8 Related Articles, Links

KARGER Full Text

Genetic engineering of allergens: future therapeutic products.

Ferreira F, Wallner M, Breiteneder H, Hartl A, Thalhamer J, Ebner C.

Institute of Genetics, University of Salzburg, Salzburg, Austria.
fatima.ferreira@mh.sbg.ac.at

Genetic engineering of allergens for specific immunotherapy should aim at the production of modified molecules with reduced IgE-binding epitopes (hypoallergens), while preserving structural motifs necessary for T cell recognition (T cell epitopes) and for induction of IgG antibodies reactive with the natural allergen (blocking antibodies). Common approaches for engineering of hypoallergens usually require knowledge of T and B cell epitopes and involve changing specific base pairs (mutated gene), introduction of a new piece of DNA into the existing DNA molecule (chimeric or hybrid gene), and deletions (truncated gene or fragments). DNA family shuffling has the advantage that it does not require a priori knowledge of structural and functional properties for efficient generation of hypoallergens. The combination of the hypoallergen concept with the Th1-inducing genetic immunization approach might be an attractive alternative for protein-based immunotherapy. Copyright 2002 S. Karger AG, Basel

Publication Types:
- Review
- Review, Tutorial

PMID: 12119498 [PubMed - indexed for MEDLINE]

1: J Allergy Clin Immunol 2002 Mar;109(3):455-62

Amb a 1-linked CpG oligodeoxynucleotides reverse established airway hyperresponsiveness in a murine model of asthma.

Santeliz JV, Van Nest G, Traquina P, Larsen E, Wills-Karp M.

Department of Environmental Health Sciences, Johns Hopkins School of Hygiene and Public Health, Baltimore, MD, USA.

BACKGROUND: Recently, it has been demonstrated that immunostimulatory DNA sequences (ISS) containing CpG motifs prevent the development of allergic airway responses in murine models of disease. However, few studies have addressed the issue of whether these agents will reverse established Tm(H)2-driven allergic airway responses. OBJECTIVE: The aim of this study was to determine whether intradermal delivery of an immunogenic protein of ragweed pollen linked to an immunostimulatory DNA sequence could reverse an established allergic response in the mouse lung. METHODS: Mice sensitized and challenged with ragweed pollen extract were treated intradermally twice at 1-week intervals with an ISS chemically linked to Amb a 1 (Amb a 1-ISS). One week after the Amb a 1-ISS treatment, mice were rechallenged intratracheally with ragweed extract, and airway responses were assessed. RESULTS: Amb a 1-ISS treatment of ragweed-sensitized and ragweed-challenged mice significantly reversed allergen-induced airway hyperresponsiveness and suppressed the total number of eosinophils in bronchoalveolar lavage fluid. The inhibitory effect of Amb a 1-ISS was associated with a marked increase in IFN-gamma levels by Amb a 1-stimulated splenocytes and a shift in the antibody profile from a T(H)2-directed IgG1 response to a T(H)1-directed IgG2a response. Interestingly, the inhibitory effect of Amb a 1-ISS on allergen-driven airway hyperresponsiveness was independent of suppression of T(H)2 cytokine production. CONCLUSION: These results demonstrate that intradermal delivery of allergen-specific DNA conjugates can reverse established allergic responses in the murine lung, supporting their potential use in the treatment of human asthma.

PMID: 11897991 [PubMed - indexed for MEDLINE]

deletions of the ECD. [redacted] determine the cell surface exp[redacted]ssion of truncated receptors we have introduced *HA*-tag between the C-terminus of the *signal* *peptide* and the N-terminus of each construct. TSHR mutants have been constructed using PCR-based methods. Basal levels of cAMP attained for each *HA*-TSHR construct after transfection in COS-7 cells have been normalized relative to the expression in the cell membrane. TSHR *deletion* mutants missing 98, 88 and 81% of the entire ECD, have showed significantly increased normalized constitutive activity (respectively 5.9, 4.5 and 5.4 fold higher activity compared to the corresponding wild-type TSHR construct). Control experiments comparing the *HA*-tagged receptors with their untagged counterparts have confirmed that the tags do not interfere with cell surface expression and have no effect on the TSHR...

20/3,K/6 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

07883959 EMBASE No: 1999339873
Secretory group IIA phospholipase Ainf 2 generates anti-apoptotic survival signals in kidney fibroblasts
Zhang Y.; Lemasters J.; Herman B.
B. Herman, Dept. of Cell. and Structural Biol., Univ. of Texas Health Science Center, 7703 Floyd Curl Dr., San Antonio, TX 78284-7762 United States
AUTHOR EMAIL: hermanb@uthscsa.edu
Journal of Biological Chemistry (J. BIOL. CHEM.) (United States) 24 SEP 1999, 274/39 (27726-27733)
CODEN: JBCHA ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 51

...the rat liver group IIA PLAinf 2 demonstrated a typical secretory signal and no alternative splicing of the primary transcript. When a sequence including the *signal* *peptide* and first 8 residues in the mature enzyme or the entire PLAinf 2 (including the *signal* *peptide*) was fused to enhanced green fluorescent protein, the fusion protein was directed to the secretory pathway rather than mitochondria in baby hamster kidney (BHK) cells. To examine the role of group IIA PLAinf 2 in cell injury, wild type (wt) rat group *HA* PLAinf 2 and a mutant group IIA PLAinf 2 containing a His-47 <rt arrow> Gln mutation (at the catalytic center) were transfected into BHK...
MEDICAL DESCRIPTORS:
signal transduction; molecular cloning; amino acid sequence; amino acid *substitution*; protein expression; inflammation; cell viability; cell survival; nonhuman; rat; animal cell; article; priority journal
?ds

Set	Items	Description
S1	5740	((DNA OR GENETIC) (W) VACCINE?) OR (GENE (W) IMMUNIZATION)
S2	97	S1 (S) (ALLERGY OR ALLERGEN OR ALLERGIC)
S3	54	RD (unique items)
S4	11	S3 AND REVIEW
S5	43	S3 NOT S4
S6	0	S5 AND (RAGWEED OR (AMB (W) A1) OR (ANTIGEN (W) E))
S7	6018	(AMB (W) A1) OR (RAGWEED) OR (ANTIGEN (W) E)
S8	137	S7 (S) (DNA OR VECTOR)
S9	0	S8 AND (HEMAGGLUTININ (W) A (W) SIGNAL (W) SEQUENCE)
S10	0	S8 AND (HA OR HEMAGGLUTININ)
S11	44	S8 AND (ALLERGY OR ALLERGIC)
S12	27	RD (unique items)
S13	1	S12 AND ((SIGNAL OR LEADER)(W) (SEQUENCE OR PEPTIDE))
S14	26	S12 NOT S13
S15	145	(HA OR (HEMAGGLUTININ (W) A)) (S) ((SIGNAL OR LEADER) (W) -

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             (SEQUENCE C[redacted]EPTIDE))
S16          0   S15 AND ((ENHANCED OR INCREASED) (W) (SECRETION OR EXPRESS-
             ION))
S17          0   S15 AND REVIEW
S18          0   S15 AND REVIEWS
S19         11   S15 AND (SUBSTITUTION OR DELETION OR REPLACEMENT)
S20          6   RD (unique items)
?logoff
       22jan03 13:58:11 User259876 Session D455.2
            $9.86    3.081 DialUnits File155
               $4.62  22 Type(s) in Format  3
            $4.62  22 Types
    $14.48  Estimated cost File155
           $15.89    2.837 DialUnits File5
              $22.75  13 Type(s) in Format  3
           $22.75  13 Types
    $38.64  Estimated cost File5
           $31.22    3.469 DialUnits File73
              $22.50  9 Type(s) in Format  3
           $22.50  9 Types
    $53.72  Estimated cost File73
            OneSearch, 3 files,  9.387 DialUnits FileOS
     $4.76  TELNET
   $111.60  Estimated cost this search
   $112.02  Estimated total session cost   9.489 DialUnits


### Status: Signed Off. (22 minutes)
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Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
Status: Signing onto Dialog
 ****
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 02.12.20D

Last logoff: 16jan03 10:38:31
Logon file001 22jan03 13:36:32
           *** ANNOUNCEMENT ***
                    ***
--File 515 D&B Dun's Electronic Business Directory is now online
completely updated and redesigned. For details, see HELP NEWS 515.
                    ***
--File 990 - NewsRoom now contains October 2002 to present records.
File 993 - NewsRoom archive contains 2002 records from January 2002-
September 2002. To search all 2002 records, BEGIN 990,993 or B NEWS2002
                    ***
--Alerts have been enhanced to allow a single Alert profile to be
stored and run against multiple files. Duplicate removal is available
across files and for up to 12 months. The Alert may be run according
to the file's update frequency or according to a custom
calendar-based schedule. There are no additional prices for these
enhanced features. See HELP ALERT for more information.
                    ***
--U.S. Patents Fulltext (File 654) has been redesigned with
new search and display features. See HELP NEWS 654 for
information.
                    ***
--Connect Time joins DialUnits as pricing options on Dialog.
See HELP CONNECT for information.
                    ***
--CLAIMS/US Patents (Files 340,341, 942) have been enhanced
with both application and grant publication level in a
single record. See HELP NEWS 340 for information.
                    ***
--SourceOne patents are now delivered to your email inbox
as PDF replacing TIFF delivery. See HELP SOURCE1 for more
information.
                    ***
--Important news for public and academic
libraries. See HELP LIBRARY for more information.
                    ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
For information about the access to file 43 please see Help News43.
***
NEW FILES RELEASED
***Dialog NewsRoom - Current 3-4 months (File 990)
***Dialog NewsRoom - 2002 Archive (File 993)
***Dialog NewsRoom - 2001 Archive (File 994)
***Dialog NewsRoom - 2000 Archive (File 995)
***TRADEMARKSCAN-Finland (File 679)

***TRADEMARKSCAN-Norway (File 678)
***TRADEMARKSCAN-Sweden (File 675)
***

UPDATING RESUMED
***Delphes European Business (File 481)
***

RELOADED
***D&B Dun's Electronic Business Directory (File 515)
***U.S. Patents Fulltext 1976-current (File 654)
***Population Demographics (File 581)
***Kompass Western Europe (File 590)
***D&B - Dun's Market Identifiers (File 516)

REMOVED
***Chicago Tribune (File 632)
***Fort Lauderdale Sun Sentinel (File 497)
***The Orlando Sentinel (File 705)
***Newport News Daily Press (File 747)
***U.S. Patents Fulltext 1980-1989 (File 653)
***Washington Post (File 146)
***Books in Print (File 470)
***Court Filings (File 793)
***Publishers, Distributors & Wholesalers of the U.S. (File 450)
***State Tax Today (File 791)
***Tax Notes Today (File 790)
***Worldwide Tax Daily (File 792)

New document supplier
IMED has been changed to INFOTRIE (see HELP OINFOTRI)

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
>>> of new databases, price changes, etc. <<<
****

KWIC is set to 50.
HILIGHT set on as '*'
* * New CURRENT Year ranges installed **

File 1:ERIC 1966-2003/Jan 22
(c) format only 2003 The Dialog Corporation

Set	Items	Description

Cost is in DialUnits
?b 155, 5, 73
22jan03 13:36:52 User259876 Session D455.1
$0.35 0.101 DialUnits File1
$0.35 Estimated cost File1
$0.07 TELNET
$0.42 Estimated cost this search
$0.42 Estimated total session cost 0.101 DialUnits

SYSTEM:OS - DIALOG OneSearch
File 155:MEDLINE(R) 1966-2003/Jan W2
***File 155: Updating of completed records has resumed.See Help News155.**
Alert feature enhanced with customized scheduling. See HELP ALERT.
File 5:Biosis Previews(R) 1969-2003/Jan W2
(c) 2003 BIOSIS
***File 5: Alert feature enhanced for multiple files, duplicates**
removal, customized scheduling. See HELP ALERT.
File 73:EMBASE 1974-2003/Jan W2
(c) 2003 Elsevier Science B.V.
***File 73: Alert feature enhanced for multiple files, duplicates**
removal, customized scheduling. See HELP ALERT.

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      Set  Items  Description
      ---  -----  -----------
?s ((DNA or genetic) (w) vaccine?) or (gene (w) immunization)
         1842134  DNA
         1212448  GENETIC
          258729  VACCINE?
            5629  (DNA OR GENETIC)(W)VACCINE?
         1966666  GENE
          174173  IMMUNIZATION
             144  GENE(W)IMMUNIZATION
      S1    5740  ((DNA OR GENETIC) (W) VACCINE?) OR (GENE (W)
                  IMMUNIZATION)
?s s1 (s) (allergy or allergen or allergic)
            5740  S1
          128481  ALLERGY
           51491  ALLERGEN
          145455  ALLERGIC
      S2      97  S1 (S) (ALLERGY OR ALLERGEN OR ALLERGIC)
?rd
...examined 50 records  (50)
...completed examining records
      S3      54  RD (unique items)
?s s3 and review
              54  S3
         1306038  REVIEW
      S4      11  S3 AND REVIEW
?t s4/3,k/all
```

4/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

13171997 21889911 PMID: 11892078

Allergen immunotherapy.

Esch R E; Portnoy J

Greer Laboratories, PO Box 800, 639 Nuway Circle, Lenoir, NC 28645, USA. esch@greerlabs.com

Curr Allergy Asthma Rep (United States) Nov 2001, 1 (6) p491-7, ISSN 1529-7322 Journal Code: 101096440

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Allergen immunotherapy plays an important role in the treatment of *allergic* diseases and asthma. This article is a brief *review* of the current approaches, including patient and *allergen* selection, routes of administration, and use of standardized *allergen* vaccines. New approaches offering potentially useful strategies based on recent studies of T-cell epitopes, cytokines, and anti-IgE and *DNA* *vaccines* also are considered.

4/3,K/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

12586764 21531403 PMID: 11674843

Designing immune responses with genetic immunization and immunostimulatory DNA sequences.

Thalhamer J; Leitner W; Hammerl P; Brtko J

Immunology Group, Institute of Chemistry and Biochemistry, University of Salzburg, Austria. Josef.Thalhamer@sbg.ac.at

Endocrine regulations (Slovakia) Sep 2001, 35 (3) p143-66, ISSN 1210-0668 Journal Code: 9112018

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... technology with new perspectives for the prevention and therapy of infectious diseases and it offers new approaches for the treatment of autoimmunity, tumors and even *allergy*. *DNA* *vaccines* are comprised of plasmid DNA which encodes antigen molecules directly in the transfected cells of a target organism. In contrast to protein-induced immune responses, *DNA* *vaccines* stimulate both humoral and cell-mediated immune reactions. In the present *review* we present a palette of unique features of genetic immunization like the effect of CpG motifs, the influence of mode and site of gene delivery...

4/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11342772 21410875 PMID: 11519127
[Present and future of vaccines]
Oya A
R & D Center BML Inc., Kawagoe 350-1101.
Rinsho byori. The Japanese journal of clinical pathology (Japan) Jul 2001, 49 (7) p667-8, ISSN 0047-1860 Journal Code: 2984781R
Document type: Journal Article; Review; Review, Tutorial ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed

It is advised to understand present status of vaccines to start of *review* history of vaccine development. Any vaccine currently used has some problems to be improved. In addition to the efficacy or safety, cost of vaccine provide...

... of vaccine production. Some vaccines such as malaria, AIDS, hepatitis C vaccines are on the way of development in the world. New technology such as *DNA* *vaccines* or vaccine for application to mucous membranes are being applied. A new concept of vaccine is presented as a prophylactic tools for cancer, auto-immune diseases or *allergic* diseases which some key proteins are known as triggers.

4/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10677469 20195492 PMID: 10729775
Molecular breeding of allergy vaccines and antiallergic cytokines.
Punnonen J
Maxygen, Redwood City, CA 94063, USA.
International archives of allergy and immunology (SWITZERLAND) Mar 2000, 121 (3) p173-82, ISSN 1018-2438 Journal Code: 9211652
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... used as therapeutics, such as vaccine antigens, growth factors and immunomodulatory molecules. Moreover, the technology can be applied to evolve entire viruses or vectors, including *DNA* *vaccines*. Cytokines downregulating *allergic* immune responses and allergens are attractive targets for evolution by molecular breeding. This *review* describes approaches to generate chimeric allergens with T cell epitopes from multiple *allergen* homologues, while reducing the recognition by preexisting IgE. In addition, the results and applications of molecular breeding in the evolution of improved antiallergic cytokines are...

4/3,K/5 (Item 5 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

10492826 20015399 PMID: 10547676
DNA vaccines: a *review*.
Lewis P J; Babiuk L A
Veterinary Infectious Disease Organization, University of Saskatchewan, Saskatoon, Canada.
Advances in virus research (UNITED STATES) 1999, 54 p129-88, ISSN 0065-3527 Journal Code: 0370441
Document type: Journal Article; Review; Review, Academic
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

DNA vaccines: a *review*.
Therapeutic and prophylactic *DNA* *vaccine* clinical trials for a variety of pathogens and cancers are underway (Chattergoon et al., 1997; Taubes, 1997). The speed with which initiation of these trials...

... the first description of "genetic immunization" (Tang et al., 1992) and within 24 months of publication of the first article describing intramuscular delivery of a *DNA* *vaccine* (Ulmer et al., 1993). Despite the relative fervor with which clinical trials have progressed, it can be safely stated that DNA-based vaccines will not be an immunological "silver bullet." In this regard, it was satisfying to see a publication entitled " *DNA* *Vaccines*--A Modern Gimmick or a Boon to Vaccinology?" (Manickan et al., 1997b). There is no doubt that this technology is well beyond the phenomenology phase...

... future studies are intricately interwoven and will ultimately determine the necessity for mechanistic understanding and the evolution of target species studies. The basic science of *DNA* *vaccines* has yet to be clearly defined and will ultimately determine the success or failure of this technology to find a place in the immunological arsenal against disease. In a commentary on a published study describing *DNA* *vaccine* -mediated protection against heterologous challenge with HIV-1 in chimpanzees, Ronald Kennedy (1997) states, "As someone who has been in the trenches of AIDS vaccine...

... seronegative ... for one year after challenge" and "Overall, these observations engender some excitement". (Kennedy, 1997). Although this may seem a less than rousing cheer for *DNA* *vaccine* technology, it is a refreshingly hopeful outlook for a pathogen to which experience has taught humility. It has also been suggested that *DNA* *vaccine* technology may find its true worth as a novel alternative option for the development of vaccines against diseases that conventional vaccines have been unsuccessful in...

...availability of a methodology that allows extremely rapid assessment and dissection of both antigens and immunity. The benefits of potent Th1-type immune responses to *DNA* *vaccines* must not be overlooked, particularly in the light of suggestions that Western culture immunization practices may be responsible for the rapid increases in adult *allergic* and possibly autoimmune disorders (Rook and Stanford, 1998). The full utility of this technology has not yet been realized, and yet its broad potential is...

4/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10052724 99029969 PMID: 9814832
Control of immune responses by gene immunization.
Lee D J; Corr M; Carson D A
Department of Medicine and The Sam and Rose Stein Institute for Research on Aging, University of California, San Diego, La Jolla 92093-0663, USA.
Annals of medicine (ENGLAND) Oct 1998, 30 (5) p460-8, ISSN

0785-3890 Journal Code: 906388
Contract/Grant No.: AR 41897; AR; NIAMS; AR07567; AR; NIAMS; AR25443; AR; NIAMS
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... desired immune response to a particular antigen. DNA immunization elicits potent cell-mediated responses including humoral immunity as well as cytolytic T-lymphocyte immunity. This *review* will first discuss the overall immune response induced by naked DNA vaccination and will then summarize recent advances in basic research on DNA immunization, which...

... useful in both basic science research and also in future vaccine development in various disease processes. Finally, we will examine the advantages and disadvantages of *DNA* *vaccines* as well as safety issues. In conclusion, DNA vaccination shows promise in a number of areas including infectious diseases, *allergy* and cancer immunotherapies.

4/3,K/7 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13777868 BIOSIS NO.: 200200406689
Immunomodulation in the treatment and/or prevention of bronchial asthma.
AUTHOR: Townley Robert G(a); Hopp Russell J; Agrawal Devendra K; Casale Thomas B; Hopfenspirger Michael T
AUTHOR ADDRESS: (a)601 N 30th Street, Suite 1630, Omaha, NE, 68131**USA E-Mail: rtownley@creighton.edu
JOURNAL: Allergology International 51 (2):p63-73 June, 2002
MEDIUM: print
ISSN: 1323-8930
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: agents to shift the immune response from a Th2 to a Th1 response, thereby decreasing the allergic inflammatory response in the airways. In the present *review* we focus on conventional immunotherapy, mycobacterial vaccines, *DNA* *vaccines* using cytosine guanosine, inhibitors of IL-4 and IL-5 and anti-IgE: Omalizumab.

4/3,K/8 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13649063 BIOSIS NO.: 200200277884
DNA vaccines: Immunology, application, and optimization.
BOOK TITLE: Annual *Review* of Immunology
AUTHOR: Gurunathan Sanjay(a); Klinman Dennis M; Seder Robert A(a)
BOOK AUTHOR/EDITOR: Paul William E; Fathman C Garrison; Glimcher Laurie H: Eds
AUTHOR ADDRESS: (a)Laboratory of Clinical Investigation, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, 20892**USA E-Mail: seder@nih.gov
JOURNAL: Annual Review of Immunology (18):p927-974 2000
MEDIUM: print
BOOK PUBLISHER: Annual Reviews, 4139 El Camino Way, Palo Alto, CA, 94303-0139, USA
ISSN: 0732-0582 ISBN: 0-8243-3018-8 (cloth)
DOCUMENT TYPE: Book
RECORD TYPE: Citation
LANGUAGE: English

BOOK TITLE: Annual *Review* of Immunology
DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: *DNA* *vaccines*--*allergic* disease immunotherapy use, cancer immunotherapy use, immunology, infectious disease immunotherapy use, optimization

4/3,K/9 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11804247 EMBASE No: 2002376598
Lessons from allergic rhinitis versus asthma pathogenesis and treatment
Grayson M.H.; Holtzman M.J.
Dr. M.J. Holtzman, Division of Critical Care Medicine, Washington Univ. School of Medicine, Campus Box 8052, 660 South Euclid Avenue, St. Louis, MO 63110 United States
AUTHOR EMAIL: holtzmanm@msnotes.wustl.edu
Immunology and Allergy Clinics of North America (IMMUNOL. ALLERGY CLIN. NORTH AM.) (United States) 2002, 22/4 (845-869)
CODEN: INCAE ISSN: 0889-8561
PUBLISHER ITEM IDENTIFIER: S0889856102000279
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 135

...in combination with other agents. Recommendations for research and development of new therapies include: (1) improving immunotherapy with recombinant or synthetic peptide allergens; (2) testing *DNA* *vaccines* with TSUBH1-stimulating capacity in models of *allergic* rhinitis and patients with *allergic* rhinitis; and (3) testing the efficacy of specific anti-inflammatory agents (eg, drugs directed against IL-4, IL-5, chemokines, chemokine receptors) in models of *allergic* rhinitis and asthma. Further definition of pathogenesis and drug action in models of *allergic* rhinitis is warranted. Comparison of these data with information on lower airway function would be useful, because an agent that affects both conditions would be...
MEDICAL DESCRIPTORS:
...efficacy; immunotherapy; lung function; side effect--side effect--si; nose irritation--side effect--si; epistaxis--side effect--si; nose septum perforation--side effect--si; human; *review*; priority journal

4/3,K/10 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

07023117 EMBASE No: 1997316224
DNA vaccines: A *review* of developments
Webster R.G.; Robinson H.L.
Dr. R.G. Webster, Dept. Virology and Molecular Biology, St. Jude Children's Res. Hospital, 332 N. Lauderdale, Memphis, TN 38105 United States
AUTHOR EMAIL: robert.webster@stjude.org
BioDrugs (BIODRUGS) (New Zealand) 1997, 8/4 (273-292)
CODEN: BIDRF ISSN: 1173-8804
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 110

DNA vaccines: A *review* of developments

...and lymphocytic choriomeningitis viruses, and to malaria and mycobacteria. However, strategies to induce protective immunity to HIV and other disease agents remain to be developed. *DNA* *vaccines* permit

modulation of the immune [redacted]sponse by altering the route o[redacted]ethod of DNA administration, by including immunostimulatory sequences in the plasmid, and by co...
...T helper 1 response provides cell-mediated immune killing of infected cells and neutralising antibody production, while a T helper 2 response induces IgE and *allergic* responses. The advantages of DNA immunisation are: (i) similarity to live attenuated vaccination but without the possibility of contamination with undesirable agents; (ii) correct presentation...

...conventional and recombinant vaccines, to include vaccines for parasites and cancer. However, it is currently too early to predict the future extent of use of *DNA* *vaccines* in human immunisation programmes because the initial clinical trials are still in progress.
MEDICAL DESCRIPTORS:
animal experiment; chicken; controlled study; gene; immune response; mouse; nonhuman; priority journal; *review*

4/3,K/11 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

06336972 EMBASE No: 1995368128
The common mucosal immune system for the reproductive tract: Basic principles applied toward an AIDS vaccine
Kiyono H.; Miller C.J.; Lu Y.; Lehner T.; Cranage M.; Huang Y.T.; Kawabata S.; Marthas M.; Roberts B.; Nedrud J.G.; Lamm M.E.; Bergmeier L.; Brookes R.; Tao L.; McGhee J.R.
Collaborat. Mucosal Imm. Res. Group, Immunobiology Vaccine Center, University of Alabama,Birmingham, AL 35294 United States
Advanced Drug Delivery Reviews (ADV. DRUG DELIV. REV.) (Netherlands) 1995, 18/1 (23-51)
CODEN: ADDRE ISSN: 0169-409X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

The concept of the Collaborative Mucosal Immunization Research Group for AIDS (CMIG) was originally conceived by the AIDS Vaccine Branch, National Institute of *Allergy* and Infectious Diseases (NIAID) in order to provide support for a cooperative research environment for the development of mucosal immunity to AIDS. We have purposely...

...specific mucosal immune responses. This issue is currently being extensively examined by the CMIG effort and a summary of our findings is discussed in this *review*. A major question in mucosal immunity involves the functions of secretory IgA (S-IgA) antibodies and this area is of particular importance in rectal and...

...for mucosal immunization (Drs. Yichen Lu and Bryan Roberts, Virus Research Institute (VRI), Boston). In addition, we are also testing other mucosal delivery systems including *DNA* *vaccine*, microspheres, cholera toxin (CT) and CT-B, recombinant poliovirus, and immune complexes. These studies represent the first efforts to induce not only Th cell mediated...
MEDICAL DESCRIPTORS:
...human immunodeficiency virus infection; intramuscular drug administration; intravaginal drug administration; male; monkey; nonhuman; oral drug administration; priority journal; recombinant dna technology; rectal drug administration; rectum; *review*; salmonella; simian immunodeficiency virus; vagina; vibrio; pharmaceutics; drug delivery system
?ds

Set	Items	Description
S1	5740	((DNA OR GENETIC) (W) VACCINE?) OR (GENE (W) IMMUNIZATION)
S2	97	S1 (S) (ALLERGY OR ALLERGEN OR ALLERGIC)
S3	54	RD (unique items)

```
S4          11   S3 AND R[redacted]EW
?s s3 not s4
              54  S3
              11  S4
      S5      43  S3 NOT S4
?s s5 and (ragweed or (Amb (w) a1) or (antigen (w) E))
              43  S5
            5517  RAGWEED
            2843  AMB
           54329  A1
               2  AMB(W)A1
          952084  ANTIGEN
         1565021  E
            1075  ANTIGEN(W)E
      S6       0  S5 AND (RAGWEED OR (AMB (W) A1) OR (ANTIGEN (W) E))
?s (Amb (w) a1) or (ragweed) or (antigen (w) E)
            2843  AMB
           54329  A1
               2  AMB(W)A1
            5517  RAGWEED
          952084  ANTIGEN
         1565021  E
            1075  ANTIGEN(W)E
      S7    6018  (AMB (W) A1) OR (RAGWEED) OR (ANTIGEN (W) E)
?s s7 (s) (DNA or vector)
            6018  S7
         1842134  DNA
          198419  VECTOR
      S8     137  S7 (S) (DNA OR VECTOR)
?s s8 and (hemagglutinin (w) A (w) signal (w) sequence)
Processing
Processing
             137  S8
           21870  HEMAGGLUTININ
        19905490  A
          570600  SIGNAL
         1348254  SEQUENCE
               0  HEMAGGLUTININ(W)A(W)SIGNAL(W)SEQUENCE
      S9       0  S8 AND (HEMAGGLUTININ (W) A (W) SIGNAL (W) SEQUENCE)
?s s8 and (HA or hemagglutinin)
             137  S8
          100821  HA
           21870  HEMAGGLUTININ
     S10       0  S8 AND (HA OR HEMAGGLUTININ)
?s s8 and (allergy or allergic)
             137  S8
          128481  ALLERGY
          145455  ALLERGIC
     S11      44  S8 AND (ALLERGY OR ALLERGIC)
?rd
...completed examining records
     S12      27  RD (unique items)
?s s12 and ((signal or leader)(w) (sequence or peptide))
              27  S12
          570600  SIGNAL
           21287  LEADER
         1348254  SEQUENCE
          634352  PEPTIDE
           40311  (SIGNAL OR LEADER)(W)(SEQUENCE OR PEPTIDE)
     S13       1  S12 AND ((SIGNAL OR LEADER)(W) (SEQUENCE OR PEPTIDE))
?t s13/3,k/all

 13/3,K/1     (Item 1 from file: 73)
DIALOG(R)File  73:EMBASE
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07367233 EMBASE No: [redacted]8239320

Cloning and expression of ragweed allergen Amb a 6

Hiller K.M.; Lubahn B.C.; Klapper D.G.

D.G. Klapper, Dept. of Microbiology/Immunology, University of North Carolina, School of Medicine, Chapel Hill, NC 27514-7290 United States

Scandinavian Journal of Immunology (SCAND. J. IMMUNOL.) (United Kingdom) 1998, 48/1 (26-36)

CODEN: SJIMA ISSN: 0300-9475

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 34

We have cloned the protein coding region of an isoform of short *ragweed* allergen Amb a 6 (Ra6) and expressed the secreted product in Pichia pastoris at mg/l levels. 5' RACE was performed using sequence obtained from a partial Amb a 6 clone. This yielded a product whose deduced protein sequence has a characteristic *signal* *sequence* motif at the N-terminus followed by sequence consistent with that previously published for highly purified Amb a 6 [Roebber et al. J Immunol 1983;131:706-11]. The region encoding the secreted product was amplified by PCR and cloned into pPICZalphaa, an expression *vector* for the yeast Pichia pastoris. Yeast transformed with this *vector* secrete a protein which migrates near Amb a 6 in SDS-PAGE. This secreted protein reacts with polyclonal anti-Amb a 6 antisera as well...

MEDICAL DESCRIPTORS:

**allergy*

?ds

Set	Items	Description
S1	5740	((DNA OR GENETIC) (W) VACCINE?) OR (GENE (W) IMMUNIZATION)
S2	97	S1 (S) (ALLERGY OR ALLERGEN OR ALLERGIC)
S3	54	RD (unique items)
S4	11	S3 AND REVIEW
S5	43	S3 NOT S4
S6	0	S5 AND (RAGWEED OR (AMB (W) A1) OR (ANTIGEN (W) E))
S7	6018	(AMB (W) A1) OR (RAGWEED) OR (ANTIGEN (W) E)
S8	137	S7 (S) (DNA OR VECTOR)
S9	0	S8 AND (HEMAGGLUTININ (W) A (W) SIGNAL (W) SEQUENCE)
S10	0	S8 AND (HA OR HEMAGGLUTININ)
S11	44	S8 AND (ALLERGY OR ALLERGIC)
S12	27	RD (unique items)
S13	1	S12 AND ((SIGNAL OR LEADER)(W) (SEQUENCE OR PEPTIDE))

?s s12 not s13

27 S12

1 S13

S14 26 S12 NOT S13

?t s14/3,k/all

14/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

13325562 21951145 PMID: 11953102

[Restricted usage of repertoire of T-cell receptor V beta in Chinese asthmatics]

Guo Xuejun; Li Weijie; Deng Weiwu; Ni Peihua; Yu Shanchang; Li Yunzhu; Zhang Hongxi

Depatment of Respiratory Medicine, Ruijin Hospital, Shanghai Second Medical University, Shanghai 200025, China.

Zhonghua jie he he hu xi za zhi = Zhonghua jiehe he huxi zazhi = Chinese journal of tuberculosis and respiratory diseases (China) Feb 2002, 25 (2) p78-80, ISSN 1001-0939 Journal Code: 8712226

Document type: Journal Article ; English Abstract

Languages: CHINESE

Main Citation Owner: NLM

Record type: Completed

... the predominant use[redacted] T cell receptors was analyzed[redacted] denaturing gel electrophoresis and single strand conformation polymorphism (SSCP) by using genescan analysis (with 377 ABI *DNA* sequencer). RESULTS: The number of cases predominantly using TCRV beta 8 gene families in asthmatics and those *allergy* to house dust mite (HDM) was significantly higher than that of normal controls (P = 0.0230, 0.0147), and so the TCR V beta 5.1 gene family for asthmatics *allergic* to HDM (P = 0.0186). It is remarkable-that only two cases in 36 asthmatics were *allergic* to *ragweed* and both of them predominantly used TCR V beta 1 gene families. The TCR V beta gene families predominantly used in asthmatics showed polyclonal expression...

... oligoclonal expression of TCR V beta 8 gene families. CONCLUSIONS: TCRV beta 8 and TCR V beta 5.1 gene families may be associated with *allergy* to HDM in asthmatics. TCR V beta gene families in asthmatic peripheral blood showed oligoclonal expression tendency.

14/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

13054766 21895706 PMID: 11897991
Amb a 1-linked CpG oligodeoxynucleotides reverse established airway hyperresponsiveness in a murine model of asthma.
Santeliz Joanna V; Van Nest Gary; Traquina Paula; Larsen Elizabeth; Wills-Karp Marsha
Department of Environmental Health Sciences, Johns Hopkins School of Hygiene and Public Health, Baltimore, MD, USA.
Journal of allergy and clinical immunology (United States) Mar 2002, 109 (3) p455-62, ISSN 0091-6749 Journal Code: 1275002
Contract/Grant No.: HL10342; HL; NHLBI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

BACKGROUND: Recently, it has been demonstrated that immunostimulatory *DNA* sequences (ISS) containing CpG motifs prevent the development of *allergic* airway responses in murine models of disease. However, few studies have addressed the issue of whether these agents will reverse established Tm(H)2-driven *allergic* airway responses. OBJECTIVE: The aim of this study was to determine whether intradermal delivery of an immunogenic protein of *ragweed* pollen linked to an immunostimulatory *DNA* sequence could reverse an established *allergic* response in the mouse lung. METHODS: Mice sensitized and challenged with *ragweed* pollen extract were treated intradermally twice at 1-week intervals with an ISS chemically linked to Amb a 1 (Amb a 1-ISS). One week after the Amb a 1-ISS treatment, mice were rechallenged intratracheally with *ragweed* extract, and airway responses were assessed. RESULTS: Amb a 1-ISS treatment of *ragweed*-sensitized and *ragweed*-challenged mice significantly reversed allergen-induced airway hyperresponsiveness and suppressed the total number of eosinophils in bronchoalveolar lavage fluid. The inhibitory effect of Amb a...

... on allergen-driven airway hyperresponsiveness was independent of suppression of T(H)2 cytokine production. CONCLUSION: These results demonstrate that intradermal delivery of allergen-specific *DNA* conjugates can reverse established *allergic* responses in the murine lung, supporting their potential use in the treatment of human asthma.

14/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11338489 21387316 PMID: 11496233
Immunostimulatory sequence *DNA* linked to the Amb a 1 allergen promotes T(H)1 cytokine expression while downregulating T(H)2 cytokine expression in

PBMCs from human patients with *ragweed* *allergy*.
Marshall J D; Abtahi S; Eiden J J; Tuck S; Milley R; Haycock F; Reid M J; Kagey-Sobotka A; Creticos P S; Lichtenstein L M; Van Nest G
Dynavax Technologies Corporation, Berkeley, California 94710, USA.
Journal of allergy and clinical immunology (United States) Aug 2001, 108 (2) p191-7, ISSN 0091-6749 Journal Code: 1275002
Contract/Grant No.: AI08270; AI; NIAID
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Immunostimulatory sequence *DNA* linked to the Amb a 1 allergen promotes T(H)1 cytokine expression while downregulating T(H)2 cytokine expression in PBMCs from human patients with *ragweed* *allergy*.
BACKGROUND: Recent studies have demonstrated that bacterially derived immunostimulatory sequences (ISSs) of *DNA* can activate the mammalian innate immune system and promote the development of T(H)1 cells. Promotion of T(H)1 immunity by means of immunotherapy in *allergic* patients has led to the alleviation of symptoms that result from allergen-specific T(H)2 responses. OBJECTIVE: Our purpose was to investigate whether the T(H)1-enhancing properties of ISSs could be used to alter the T(H)2-dominated immune response of *allergic* PBMCs in vitro. METHODS: *Ragweed* protein-linked ISS (PLI) was generated from a specific, highly active 22-base ISS and Amb a 1, the immunodominant allergen in *ragweed* pollen, to combine the T(H)1-enhancing properties of ISSs with allergen selectivity, and its activity was investigated in PBMC cultures from subjects with *ragweed* *allergy*. RESULTS: PLI was markedly successful at reversing the dominant allergen-induced T(H)2 profile while greatly enhancing IFN-gamma production. Delivering ISSs in a...

14/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10927136 20507710 PMID: 11053285
Prevention of acute *allergic* conjunctivitis and late-phase inflammation with immunostimulatory DNA sequences.
Miyazaki D; Liu G; Clark L; Ono S J
Schepens Eye Research Institute, Brigham and Women's Hospital and. Committee on Immunology, Harvard Medical School, Boston, Massachusetts, USA.
Investigative ophthalmology & visual science (UNITED STATES) Nov 2000, 41 (12) p3850-5, ISSN 0146-0404 Journal Code: 7703701
Contract/Grant No.: EY12523; EY; NEI; RO1EY1901; EY; NEI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Prevention of acute *allergic* conjunctivitis and late-phase inflammation with immunostimulatory DNA sequences.
PURPOSE: To evaluate the therapeutic potential of immunostimulatory sequence oligodeoxynucleotides (ISS-ODN) administration in ocular *allergy* , using a mouse model of *ragweed*-specific conjunctivitis. METHODS: A murine model of *allergic* conjunctivitis involving SWR/J mice sensitized and challenged with short *ragweed* was used to test immunostimulatory *DNA* sequences for therapeutic potential. ISS-ODN or control ODN (0.1 mg/mouse) was administered intraperitoneally or topically to the conjunctiva 3 days before final...

... injection) completely inhibited both eosinophilia and neutrophilia in the late-phase reaction. CONCLUSIONS: Systemic or conjunctival administration of ISS-ODN was shown to significantly inhibit *allergic* responses in this mouse model. This indicates that ISS-ODN may be an effective form of immunotherapy for this class of *allergic* disease.

Descriptors: Conjunctivitis, *Allergic*--prevention and control--PC; *DNA --immunology--IM; *Hypersensitivity, Delayed--prevention and control--PC; *Oligodeoxyribonucleotides--immunology--IM; *Thionucleotides--immunology --IM; *Vaccines, DNA--therapeutic use--TU; Acute Disease; Adjuvants, Immunologic; Administration, Topical; Allergens--adverse effects--AE; Chemotaxis, Leukocyte--drug effects--DE; Conjunctivitis, *Allergic* --etiology--ET; Conjunctivitis, *Allergic*--pathology--PA; Eosinophilia --prevention and control--PC; Eosinophils--drug effects--DE; Hypersensitivity, Delayed--etiology--ET; Hypersensitivity, Delayed --pathology--PA; Injections, Intraperitoneal; Mice; Neutrophils --drug effects...

14/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10841571 20395222 PMID: 10940873
Systemic or mucosal administration of immunostimulatory DNA inhibits early and late phases of murine *allergic* conjunctivitis.
Magone M T; Chan C C; Beck L; Whitcup S M; Raz E
National Eye Institute, National Institutes of Health, Bethesda 20892-1857, USA.
European journal of immunology (GERMANY) Jul 2000, 30 (7) p1841-50, ISSN 0014-2980 Journal Code: 1273201
Contract/Grant No.: AI 40682; AI; NIAID
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Systemic or mucosal administration of immunostimulatory DNA inhibits early and late phases of murine *allergic* conjunctivitis.
Seasonal *allergic* conjunctivitis is one of the most common manifestations of *allergic* disease, affecting 15 % population in the United States annually. Short *ragweed* (RW) is a major cause of seasonal allergies. Immunostimulatory *DNA* sequences (ISS or CpG motifs) can inhibit an on-going Th2/*allergic* response and induce a de novo Th1 response. In this study, we investigated the ability of these ISS to modulate *allergic* responses in a RW-induced mouse model of seasonal *allergic* conjunctivitis. Systemic or mucosal administration of ISS oligonucleotide (ISS-ODN) after RW sensitization inhibited both the immediate hypersensitivity response and the late-phase cellular infiltration...

... ODN administration suppressed the rise of RW-specific IgE titers after repeated allergen challenge. Furthermore, ISS administration was more effective than dexamethasone in inhibiting the *allergic* response. Mechanistically, the ISS-induced immunomodulatory effects were abolished when mice were treated with anti-IL-12 neutralizing antibodies, suggesting a pivotal role for type...

... both the immediate hypersensitivity and the late-phase cellular infiltration. Thus, ISS-ODN is a novel anti-inflammatory and immunomodulatory agent that significantly inhibits the *allergic* response and may provide an alternative to the current standard care of ocular *allergy*.
Descriptors: Conjunctivitis, *Allergic*--immunology--IM; *DNA--immunology --IM

14/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10806375 20347064 PMID: 10887315
Conjugation of immunostimulatory *DNA* to the short *ragweed* allergen amb a 1 enhances its immunogenicity and reduces its allergenicity.

Tighe H; Takabayashi [redacted]; Schwartz D; Van Nest G; [redacted] S; Eiden J J; Kagey-Sobotka A; Creticos P S; Lichtenstein L M; Spiegelberg H L; Raz E
Department of Medicine and The Sam and Rose Stein Institute for Research on Aging, and the Department of Pediatrics, University of California San Diego School of Medicine, La Jolla, CA, USA.
Journal of allergy and clinical immunology (UNITED STATES) Jul 2000, 106 (1 Pt 1) p124-34, ISSN 0091-6749 Journal Code: 1275002
Contract/Grant No.: AI40682; AI; NIAID
Comment in J Allergy Clin Immunol. 2000 Jul;106(1 Pt 1) 37-40; Comment in PMID 10887302
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Conjugation of immunostimulatory *DNA* to the short *ragweed* allergen amb a 1 enhances its immunogenicity and reduces its allergenicity.
... to improve the safety of immunotherapy by means of chemical modification of allergens have not been successful because it greatly reduced their antigenicity. Recently, immunostimulatory *DNA* sequences (ISS or CpG motifs) have been shown to act as strong T(H)1 response-inducing adjuvants. OBJECTIVE: We sought to determine whether conjugation of ISS to the major short *ragweed* allergen Amb a 1 results in enhanced immunotherapeutic potential in mice and decreased allergenicity in human subjects. METHODS: A 22-mer ISS oligodeoxynucleotide (ISS-ODN...

... ISS conjugate was less allergenic than Amb a 1 alone, as shown by a 30-fold lower histamine release from human basophils of patients with *ragweed* *allergy* , whereas mixing ISS-ODN with Amb a 1 did not reduce histamine release. CONCLUSION: Amb a 1-ISS conjugate has an enhanced T(H)1 ...

14/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09958187 98400992 PMID: 9730879
Combined nasal challenge with diesel exhaust particles and allergen induces In vivo IgE isotype switching.
Fujieda S; Diaz-Sanchez D; Saxon A
The Hart and Louise Lyon Laboratory, Division of Clinical Immunology/Allergy, Department of Medicine, The Jonsson Comprehensive Cancer Center Institute, University of California, Los Angeles, USA. sfujieda@fmsrsa.fukui-med.ac.jp
American journal of respiratory cell and molecular biology (UNITED STATES) Sep 1998, 19 (3) p507-12, ISSN 1044-1549 Journal Code: 8917225
Contract/Grant No.: AI-15251; AI; NIAID; AI34567; AI; NIAID
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

In this study we undertook to provide evidence for local in vivo isotype switching to IgE following nasal challenges. Detection of deleted switch circular *DNA* (switch circles) by a novel nested polymerase chain reaction-based approach was employed as definitive molecular evidence of Ig isotype switching. Nasal challenge in humans with diesel exhaust particles (DEP) plus *ragweed* antigen has been shown to enhance local IgE production, stimulate local cytokine production, and markedly increase mucosal IgE antibody to *ragweed*. Four days after combined intranasal DEP plus *ragweed* challenge, we detected and characterized clones of deleted switch circular *DNA* (Sepsilon /Smu) representing switching from mu to epsilon from nasal lavage cells. No switch circular *DNA* was detected in nasal lavage cells following challenge with DEP alone nor with *ragweed* allergen alone. These results indicate that the combination of mucosal stimulation with DEP and *ragweed* allergen is capable of driving in vivo

isotype switching to Ig[redacted]n humans with *ragweed* *aller[redacted]. These results are the first direct demonstration of in vivo IgE isotype switching in humans.

14/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09736581 98158673 PMID: 9490655
T-Cell repertoire in the blood and lungs of atopic asthmatics before and after ragweed challenge.
Yurovsky V V; Weersink E J; Meltzer S S; Moore W C; Postma D S; Bleecker E R; White B
Department of Medicine, University of Maryland, Baltimore, Maryland 21201, USA. vyurovsk@umabnet.ab.umd.edu
American journal of respiratory cell and molecular biology (UNITED STATES) Mar 1998, 18 (3) p370-83, ISSN 1044-1549 Journal Code: 8917225
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

T cells play a pivotal role in initiating and orchestrating *allergic* responses in asthma. The goal of this work was to learn whether *ragweed* challenge in the lungs alters the T-cell repertoire expressed in the blood and lungs of atopic asthmatics. Analyses of cell numbers, differentials, and T-cell subsets in bronchoalveolar lavage (BAL) fluids showed that *ragweed* challenge was associated with preferential recruitment of CD4+ T cells into the lungs. A reverse transcriptase-polymerase chain reaction (RT-PCR) was used to amplify...

... BAL fluids. As judged by RT-PCR, the usage of TCR Valpha and Vbeta gene families in BAL fluids was similar to that in blood. *Ragweed* challenge did not change the levels of expression of these V gene families. The clonality of T cells was estimated by analyzing the diversity of...

... gene family, using sequencing gel electrophoresis. Most V gene families in blood and BAL fluids were associated with multiple junctional region lengths before and after *ragweed* challenge, indicating polyclonal expression. Some V gene families were expressed in an oligoclonal manner in unfractionated, CD4+, and CD8+ T cells in BAL fluids before *ragweed* challenge, as indicated by a few predominant junctional region lengths. The majority of these V gene families became polyclonal after challenge, compatible with polyclonal T-cell influx during inflammation immediately after *ragweed* challenge. However, some V gene families became oligoclonal or developed a new oligoclonal pattern of junctional region lengths in BAL T cells after *ragweed* challenge. Surprisingly, this occurred in both CD4+ and CD8+ T cells. In one of these instances, *DNA* sequencing of Vbeta21 junctional regions in CD8+ T cells confirmed a change from polyclonal to oligoclonal expression after *ragweed* challenge. These findings show that *ragweed* challenge is associated with polyclonal influx and oligoclonal activation of both CD4+ and CD8+ T cells in the lungs.

14/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08007740 94141215 PMID: 8308292
Detection of allergen- and mitogen-induced human cytokine transcripts using a competitive polymerase chain reaction.
Huang S K; Essayan D M; Krishnaswamy G; Yi M; Kumai M; Su S N; Xiao H Q; Lichtenstein L M; Liu M C
Johns Hopkins Asthma and Allergy Center, Baltimore, MD 21224-6801.
Journal of immunological methods (NETHERLANDS) Feb 10 1994, 168 (2) p167-81, ISSN 0022-1759 Journal Code: 1305440
Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... 4, IL-5, and IFN-gamma) from a variety of cell sources, including peripheral blood mononuclear cells (PBMCs) stimulated with either a mitogen (PHA) or *ragweed* pollen allergen extract, and cells from allergen-challenged inflammatory sites. Quantitative analysis of IL-5, IL-4 and IFN-gamma transcripts was achieved by a...

... polymerase chain reaction (RT-PCR) technique using internal standard (IS) cRNAs in the presence of specific oligonucleotide primers. Each IS was generated from a plasmid *vector* containing the respective cytokine cDNA modified by insertion with an SV40-*DNA* fragment. Both test RNA and IS were reverse-transcribed and subjected to the 'competitive' PCR in the same tube. We first demonstrate the linearity and...

... assay to analyze quantitatively the expression of IL-4, IL-5, and IFN-gamma transcripts in PBMCs before and after stimulation with PHA or crude *ragweed* allergen. Finally, we analyzed cells isolated from the lung lavage fluids of an atopic subject following allergen challenge, and showed a significant increase of IL...

... site when compared to the control. This technique of PCR quantitation provides an easy and efficient tool to study the expression of cytokine genes in *allergic* inflammatory diseases.

14/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07766732 93294294 PMID: 7685794
Cloning and expression of immunologically active recombinant Amb a V allergen of short ragweed (Ambrosia artemisiifolia) pollen.
Ghosh B; Perry M P; Rafnar T; Marsh D G
Division of Clinical Immunology, Johns Hopkins Asthma and Allergy Center, Johns Hopkins University School of Medicine, Baltimore, MD 21224.
Journal of immunology (Baltimore, Md. : 1950) (UNITED STATES) Jun 15 1993, 150 (12) p5391-9, ISSN 0022-1767 Journal Code: 2985117R
Contract/Grant No.: AI-19727; AI; NIAID
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

We have cloned and sequenced Amb a V, an Ambrosia artemisiifolia (short *ragweed*) pollen allergen that has proved to be particularly useful in the genetic analysis of human immune responsiveness. The amino acid sequence deduced from the cloned...

... enzymatically at the C-terminal lysine found in the 45-residue protein isolated from the pollen. The cloning and sequencing of Amb a V genomic *DNA* confirmed the cDNA sequence and showed that the Amb a V gene has no introns. Recombinant Amb a V allergen, expressed in Escherichia coli, bound to IgG and IgE antibodies in all Amb a V-*allergic* individuals tested and inhibition studies demonstrated that the recombinant protein contains a subset of the antigenic epitopes found on native Amb a V. In addition, recombinant Amb a V released histamine efficiently from basophils from Amb a V-*allergic* patients. The recombinant Amb a V allergen and mutants of Amb a V should, therefore, be useful in studies of allergen epitopes in humans, as...

14/3,K/11 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07128845 92062252 PM[redacted] 1953919

Molecular and cellular studies of human immune responsiveness to the short ragweed allergen, Amb a V.

Marsh D G; Zwollo P; Huang S K

Division of Clinical Immunology, Johns Hopkins Asthma and Allergy Center, Johns Hopkins University School of Medicine, Baltimore, MD 21224.

European respiratory journal. Supplement (DENMARK) Apr 1991, 13 p60s-67s, ISSN 0904-1850 Journal Code: 8910681

Contract/Grant No.: AI20059; AI; NIAID

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Specific immune responsiveness to the Amb a V allergen (from Ambrosia artemisiifolia, short *ragweed* pollen) is significantly associated with the Class II specificities, human leucocyte antigen (HLA)-DR2 and Dw2 determined by serological and MLR typing ("DR2.2"). Similarly, responsiveness to homologous Amb t V and Amb p V allergens is associated with DR2.2. We examined the deoxyribonucleic acid (*DNA*) sequences of HLA-DRB1, DRB5, DQB1 and DQA1 genes associated with Amb a V responsiveness using a combination of polymerase chain reaction (PCR), dot-blot and *DNA* sequencing methodologies. Our focus was on the highly polymorphic regions within the second-exon gene segments that are believed to encode antigen (Ag)-binding portions...

... DR2.2 molecule is usually a necessary, and almost always a sufficient, requirement for high immunoglobulin E and G (IgE) and (IgG) antibody responsiveness in *ragweed*-*allergic* individuals. From an atopic DR2.2+ subject, we isolated three Amb a V-specific T-cell clones. Analysis revealed these clones to be DR-restricted...

14/3,K/12 (Item 12 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

06029687 89109894 PMID: 2563269

Association of class II *DNA* restriction fragments with responsiveness to Ambrosia artemisiifolia (short *ragweed*)-pollen allergen Amb a V in *ragweed*-*allergic* patients.

Zwollo P; Ansari A A; Marsh D G

Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD 21239.

Journal of allergy and clinical immunology (UNITED STATES) Jan 1989, 83 (1) p45-54, ISSN 0091-6749 Journal Code: 1275002

Contract/Grant No.: AI-19727; AI; NIAID; AI-20059; AI; NIAID

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Association of class II *DNA* restriction fragments with responsiveness to Ambrosia artemisiifolia (short *ragweed*)-pollen allergen Amb a V in *ragweed*-*allergic* patients.

Human IgE and IgG antibody responsiveness to the short *ragweed*-pollen allergen Amb a V (formerly known as Ra5) has been found to be strongly associated with HLA-D specificities Dw2 and DR2 in *ragweed*-*allergic* white individuals. To study the molecular basis of these associations, restriction fragment length polymorphism (RFLP) mapping was performed on a group of 45 white *ragweed*-*allergic* patients with full-length HLA-DR beta, DQ beta, and DQ alpha cDNA probes. The data on 41 of these subjects were used for the...

... that such an association has been found between a person's immune response to a well-defined antigen and a set of HLA class II *DNA* restriction fragments.

14/3,K/13 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13673082 BIOSIS NO.: 200200301903
Induction of a specific Th1 response by allergen-linked immunostimulatory DNA in the nasal explant.
AUTHOR: Christodoulopoulos Pota(a); Lavigne Francois; Marshall Jason; Van Nest Gary; Eiden Joseph; Hamid Qutayba A(a)
AUTHOR ADDRESS: (a)Meakins-Christie Laboratory, McGill University, Montreal, PQ**Canada
JOURNAL: Journal of Allergy and Clinical Immunology 109 (1 Supplement):p S316 January, 2002
MEDIUM: print
CONFERENCE/MEETING: 58th Annual Meeting of the American Academy of Allergy, Asthma and Immunology New York, NY, USA March 01-06, 2002
ISSN: 0091-6749
RECORD TYPE: Citation
LANGUAGE: English

DESCRIPTORS:
MAJOR CONCEPTS: *Allergy* (Clinical Immunology, Human Medicine, Medical Sciences...
...ORGANISMS: *allergic* reaction
DISEASES: ragweed pollen *allergy*--
CHEMICALS & BIOCHEMICALS: *ragweed* pollen allergen-linked immunostimulatory *DNA*--

14/3,K/14 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13221998 BIOSIS NO.: 200100429147
Immunostimulatory sequence *DNA* linked to the Amb a 1 allergen promotes TH1 cytokine expression while downregulating TH2 cytokine expression in PBMCs from human patients with *ragweed* *allergy*.
AUTHOR: Marshall Jason D; Abtahi Simin; Eiden Joseph J; Tuck Stephen; Milley Robert; Haycock Fiona; Reid Michael J; Kagey-Sobotka Anne; Creticos Peter S; Lichtenstein Lawrence M; Van Nest Gary(a)
AUTHOR ADDRESS: (a)Dynavax Technologies Corp, 717 Potter St, Ste 100, Berkeley, CA, 94710**USA
JOURNAL: Journal of Allergy and Clinical Immunology 108 (2):p191-197 August, 2001
MEDIUM: print
ISSN: 0091-6749
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

Immunostimulatory sequence *DNA* linked to the Amb a 1 allergen promotes TH1 cytokine expression while downregulating TH2 cytokine expression in PBMCs from human patients with *ragweed* *allergy*.

ABSTRACT: Background: Recent studies have demonstrated that bacterially derived immunostimulatory sequences (ISSs) of *DNA* can activate the mammalian innate immune system and promote the development of TH1 cells. Promotion of TH1 immunity by means of immunotherapy in *allergic* patients has led to the alleviation of symptoms that result from allergen-specific TH2 responses. Objective: Our purpose was to investigate whether the TH1-enhancing properties of ISSs could be used to alter the TH2-dominated immune response of *allergic* PBMCs in vitro. Methods: *Ragweed* protein-linked ISS (PLI) was generated from a

specific, highly active [redacted]2-base ISS and Amb a 1, the imm[redacted]dominant allergen in *ragweed* pollen, to combine the TH1-enhancing properties of ISSs with allergen selectivity, and its activity was investigated in PBMC cultures from subjects with *ragweed* *allergy*. Results: PLI was markedly successful at reversing the dominant allergen-induced TH2 profile while greatly enhancing IFN-gamma production. Delivering ISSs in a linked form...
DESCRIPTORS:
DISEASES: ragweed *allergy*--

14/3,K/15 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12968207 BIOSIS NO.: 200100175356
Allergen-*DNA* conjugates reduce airway hyperresponsiveness in a *ragweed* murine model of asthma.
AUTHOR: Santeliz J V(a); Van Nest G; Traquina P; Larsen E; Wills-Karp H(a)
AUTHOR ADDRESS: (a)Johns Hopkins University, Baltimore, MD**USA
JOURNAL: Journal of Allergy and Clinical Immunology 107 (2):pS141 February, 2001
MEDIUM: print
CONFERENCE/MEETING: 57th Annual Meeting of the American Academy of Allergy, Asthma and Immunology New Orleans, Louisiana, USA March 16-21, 2001
ISSN: 0091-6749
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English

Allergen-*DNA* conjugates reduce airway hyperresponsiveness in a *ragweed* murine model of asthma.
MISCELLANEOUS TERMS: *allergic* response...

14/3,K/16 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12834962 BIOSIS NO.: 200100042111
The in vivo efficacy of plasmid *DNA* vaccination against the short *ragweed* allergen *Amb* *a1* is increased by humanizing its codon usage and by co-injecting ISS-ODN.
AUTHOR: Takabayashi K(a); Takenouchi M(a); Kim S(a); Horner A(a); Spiegelberg H(a); Raz E(a)
AUTHOR ADDRESS: (a)Department of Medicine, University of California San Diego, La Jolla, CA, 92121**USA
JOURNAL: FASEB Journal 14 (6):pA1065 April 20, 2000
MEDIUM: print
CONFERENCE/MEETING: Joint Annual Meeting of the American Association of Immunologists and the Clinical Immunology Society Seattle, Washington, USA May 12-16, 2000
ISSN: 0892-6638
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English

The in vivo efficacy of plasmid *DNA* vaccination against the short *ragweed* allergen *Amb* *a1* is increased by humanizing its codon usage and by co-injecting ISS-ODN.
DESCRIPTORS:
MAJOR CONCEPTS: *Allergy* (Clinical Immunology, Human Medicine, Medical Sciences...
DISEASES: *allergy*--

14/3,K/17 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12386706 BIOSIS NO.: 200000140208
Conjugation of immunostimulatory *DNA* (ISS) to the major short *ragweed* allergen, Amb a 1, enhances immunogenicity and reduces allergenicity.
AUTHOR: Van Nest G; Eiden J J; Tuck S F; Kagey-Sobatka A; Creticos P S; Lichtenstein L M; Spiegelberg H L; Raz E
JOURNAL: Journal of Allergy and Clinical Immunology. 105 (1 part 2):pS70 Jan., 2000
CONFERENCE/MEETING: 56th Annual Meeting of the American Academy of Allergy, Asthma and Immunology. San Diego, California, USA March 03-08, 2000
SPONSOR: American Academy of Allergy, Asthma and Immunology
ISSN: 0091-6749
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English

Conjugation of immunostimulatory *DNA* (ISS) to the major short *ragweed* allergen, Amb a 1, enhances immunogenicity and reduces allergenicity.
...MAJOR CONCEPTS: *Allergy* (Clinical Immunology, Human Medicine, Medical Sciences

14/3,K/18 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09224798 BIOSIS NO.: 199497233168
Immunologic and molecular characterization of Amb p V allergens from Ambrosia psilostachya (western Ragweed) pollen.
AUTHOR: Ghosh Balaram(a); Rafnar Thorunn; Perry Michael P; Bassolino-Klimas Donna; Metzler William J; Klapper David G; Marsh David G
AUTHOR ADDRESS: (a)Div. Clin. Immunol., Johns Hopkins Asthma and Allergy Cent., Johns Hopkins Univ. Sch. Med., 5501**USA
JOURNAL: Journal of Immunology 152 (6):p2882-2889 1994
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: We have purified and characterized the Amb p V allergen (A1 variant) from western *ragweed* (Ambrosia psilostachya) pollen. This allergen was found to be highly cross-reactive with the Amb a VA1 allergen from short *ragweed* (A. artemisiifolia) pollen in a competitive double-Ab radioimmunoassay (DARIA) and the two allergens showed concordant allergenic potency in histamine-release experiments. We cloned and sequenced several Amb p V genes from western *ragweed* pollen and flowers by direct PCR of genomic *DNA*. The amino acid sequences deduced from the nucleotide sequences indicated the presence of multiple forms of Amb p V that could be broadly classified into...

...modeling. Comparison of antigenic epitopes predicted for the structures of Amb p V variants and Amb a VAI explains the observed crossreactivity of the two *ragweed* proteins and suggests the epitopes likely to be involved in Ab recognition.
MAJOR CONCEPTS: *Allergy* (Clinical Immunology, Human Medicine, Medical Sciences...

14/3,K/19 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08104003 BIOSIS NO.: 000042096201

MOLECULAR DEMONSTRATION OF THE INVOLVEMENT OF HUMAN T CELL IN THE LATE-PHASE REACTIONS
AUTHOR: HUANG S-K; KRISH G; MASSEY W; LIU M; MARSH D G
AUTHOR ADDRESS: BALTIMORE, MD.
JOURNAL: FORTY-EIGHTH ANNUAL MEETING OF THE AMERICAN ACADEMY OF ALLERGY AND IMMUNOLOGY, ORLANDO, FLORIDA, USA, MARCH 6-11, 1992. J ALLERGY CLIN IMMUNOL 89 (1 PART 2). 1992. 220. 1992
CODEN: JACIB
DOCUMENT TYPE: Meeting
RECORD TYPE: Citation
LANGUAGE: ENGLISH

DESCRIPTORS: ABSTRACT SKIN LUNG POLYMERASE CHAIN REACTION COMPLEMENTARY *DNA* *RAGWEED* ALLERGEN RYEGRASS ALLERGEN GENE AMPLIFICATION GENE ACTIVATION *ALLERGY*

14/3,K/20 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

07750767 BIOSIS NO.: 000092064488
CLONING THE COMPLEMENTARY *DNA* ENCODING THE AMBTV ALLERGEN FROM GIANT *RAGWEED* AMBROSIA-TRIFIDA POLLEN
AUTHOR: GHOSH B; PERRY M P; MARSH D G
AUTHOR ADDRESS: JOHNS HOPKINS ASTHMA ALLERGY CENT., JOHNS HOPKINS UNIV. SCH. MED., 301 BAYVIEW BLVD., UNIT OFFICE 1, BALTIMORE, MD. 21224.
JOURNAL: GENE (AMST) 101 (2). 1991. 231-238. 1991
FULL JOURNAL NAME: GENE (Amsterdam)
CODEN: GENED
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

CLONING THE COMPLEMENTARY *DNA* ENCODING THE AMBTV ALLERGEN FROM GIANT *RAGWEED* AMBROSIA-TRIFIDA POLLEN

ABSTRACT: Ragweed (Ambrosia) pollens contain a number of proteins that cause *allergic* disease in ragweed-sensitive people. The cloning of the AmbtV cDNA is important, since the 4.4-kDa AmbtV, one of the allergens in giant...
DESCRIPTORS: HUMAN *ALLERGIC* DISEASE IMMUNE RECOGNITION MOLECULAR SEQUENCE DATA NUCLEOTIDE SEQUENCE AMINO ACID SEQUENCE

14/3,K/21 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03243747 BIOSIS NO.: 000071056858
CORRELATION BETWEEN LYMPHOCYTE RESPONSES AND IMMEDIATE HYPER SENSITIVITY TO PURIFIED ALLERGENS
AUTHOR: BLACK P L; MARSH D G
AUTHOR ADDRESS: DEP. MICROBIOL. IMMUNOL., TEMPLE UNIV. HEALTH SCI. CENT., 3400 N. BROAD ST., PHILADELPHIA, PA. 19140, USA.
JOURNAL: J ALLERGY CLIN IMMUNOL 66 (5). 1980. 394-401. 1980
FULL JOURNAL NAME: Journal of Allergy and Clinical Immunology
CODEN: JACIB
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Unrelated subjects [79] were selected for high *allergic* sensitivity to ragweed and/or grass pollens. Sensitivities to ragweed antigens E and Ra5 and rye grass group I were measured by intradermal skin testing...

...sensitive individuals had marked delayed, but no immediate, reactions to

Ra5 and almost all show[redacted] lymphocyte reponses to Ra5. Im[redacted]diate sensitivity and lymphocyte responses of *allergic* individuals to antigen E are significantly correlated. Lymphocyte responses and delayed reaction to an antigen without sensitivity or IgG antibody are possible, even in *allergic* subjects.
DESCRIPTORS: HUMAN *RAGWEED* GRASS POLLEN RYE GRASS SERUM IMMUNO GLOBULIN E IMMUNO GLOBULIN G HISTAMINE RELEASE *DNA* SYNTHESIS DELAYED HYPER SENSITIVITY INTRA DERMAL SKIN TESTING

14/3,K/22 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

01465124 BIOSIS NO.: 000058035109
IMMUNOGENIC PROPERTIES OF MODIFIED ANTIGEN E PART 1 PRESENCE OF SPECIFIC DETERMINANTS FOR THYMUS DERIVED LYMPHOCYTES IN DENATURED ANTIGEN AND POLY PEPTIDE CHAINS
AUTHOR: ISHIZAKA K; KISHIMOTO T; DELESPESSE G; KING T P
JOURNAL: J IMMUNOL 113 (1). 1974 70-77. 1974
FULL JOURNAL NAME: Journal of Immunology
CODEN: JOIMA
RECORD TYPE: Citation

DESCRIPTORS: HUMAN RABBIT ANTIBODY IMMUNO GLOBULIN G IMMUNO GLOBULIN E ERYTHEMA WHEAL REACTIONS *RAGWEED* *ALLERGY* IN-VITRO DI NITRO PHENYL ANTIBODY PRODUCTION CARRIER SPECIFIC HELPER CELL STIMULATION IN-VITRO LYMPHOCYTE *DNA* SYNTHESIS

14/3,K/23 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11268429 EMBASE No: 2001283002
Immunostimulatory sequence *DNA* linked to the Amb a 1 allergen promotes TSUBH1 cytokine expression while downregulating TSUBH2 cytokine expression in PBMCs from human patients with *ragweed* *allergy*
Marshall J.D.; Abtahi S.; Eiden J.J.; Tuck S.; Milley R.; Haycock F.; Reid M.J.; Kagey-Sobotka A.; Creticos P.S.; Lichtenstein L.M.; Van Nest G.
Dr. G. Van Nest, Dynavax Technologies Corp., 717 Potter St, Berkeley, CA 94710 United States
Journal of Allergy and Clinical Immunology (J. ALLERGY CLIN. IMMUNOL.) (United States) 2001, 108/2 (191-197)
CODEN: JACIB ISSN: 0091-6749
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 32

Immunostimulatory sequence *DNA* linked to the Amb a 1 allergen promotes TSUBH1 cytokine expression while downregulating TSUBH2 cytokine expression in PBMCs from human patients with *ragweed* *allergy*

Background: Recent studies have demonstrated that bacterially derived immunostimulatory sequences (ISSs) of *DNA* can activate the mammalian innate immune system and promote the development of TSUBH1 cells. Promotion of TSUBH1 immunity by means of immunotherapy in *allergic* patients has led to the alleviation of symptoms that result from allergen-specific TSUBH2 responses. Objective: Our purpose was to investigate whether the TSUBH1-enhancing properties of ISSs could be used to alter the TSUBH2-dominated immune response of *allergic* PBMCs in vitro. Methods: *Ragweed* protein-linked ISS (PLI) was generated from a specific, highly active 22-base ISS and Amb a 1, the immunodominant allergen in *ragweed* pollen, to combine the TSUBH1-enhancing properties of ISSs with allergen selectivity, and its activity was investigated in PBMC cultures from subjects with *ragweed* *allergy*. Results: PLI was markedly successful at

reversing the dominant allergen-induced TSUBH2 profile while greatly enhancing IFN-gamma production. Delivering ISSs in a linked form...
MEDICAL DESCRIPTORS:
**allergy*; *cytokine production; *Th1 cell; *Th2 cell

14/3,K/24 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

10782757 EMBASE No: 2000263359
Conjugation of immunostimulatory *DNA* to the short *ragweed* allergen Amb a 1 enhances its immunogenicity and reduces its allergenicity
Takabayashi H.; Tighe K.; Schwartz D.; Nest G.V.; Tuck S.; Eiden J.J.; Kagey- Sobotka A.; Creticos P.S.; Lichtenstein L.M.; Spiegelberg H.L.; Raz E.
Dr. E. Raz, Department of Medicine, University of California, San Diego School of Medicine, 9500 Gilman Dr, San Diego, CA 92093-0663 United States
Journal of Allergy and Clinical Immunology (J. ALLERGY CLIN. IMMUNOL.) (United States) 2000, 106/1 I (124-134)
CODEN: JACIB ISSN: 0091-6749
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 30

Conjugation of immunostimulatory *DNA* to the short *ragweed* allergen Amb a 1 enhances its immunogenicity and reduces its allergenicity

...to improve the safety of immunotherapy by means of chemical modification of allergens have not been successful because it greatly reduced their antigenicity. Recently, immunostimulatory *DNA* sequences (ISS or CpG motifs) have been shown to act as strong T(H)1 response-inducing adjuvants. Objective: We sought to determine whether conjugation of ISS to the major short *ragweed* allergen Arab a I results in enhanced immunotherapeutic potential in mice and decreased allergenicity in human subjects. Methods: A 22-mer ISS oligodeoxynucleotide (ISS-ODN...

...ISS conjugate was less allergenic than Amb a 1 alone, as shown by a 30-fold lower histamine release from human basophils of patients with *ragweed* *allergy*, whereas mixing ISS-ODN with Amb a 1 did not reduce histamine release. Conclusion: Amb a 1-ISS conjugate has an enhanced T(H)1 ...

14/3,K/25 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

04982187 EMBASE No: 1992122403
Studies of the HLA class II alleles involved in human responses to ragweed allergens Ambrosia artemisiifolia V (Ra5S) and Ambrosia trifda V (Ra5G)
Goldstein R.; Yang W.H.; Drouin M.A.; Karsh J.
Division of Rheumatology, Ottawa General Hospital, 501 Smyth Road,Ottawa, Ont. Canada
Tissue Antigens (TISSUE ANTIGENS) (Denmark) 1992, 39/3 (122-127)
CODEN: TSANA ISSN: 0001-2815
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...V) with HLA-DRw52 haplotypes in atopic individuals. Using HLA class II typing by restriction fragment length polymorphism (RFLP) analysis with DRB, DQB and DQA *DNA* probes to define the HLA-D alleles, we have demonstrated the association of the DQw6 in 16 out of 16 (100%) Amb a V-responsive individuals, compared to 3 out of 18 (17%) *ragweed*-sensitive

but Amb a V-nonresponsive individuals (p = 5.7 * 10sup -su[illegible]6, RR > 75). We suggest that the DQw6 association with Amb a V...
MEDICAL DESCRIPTORS:
allele; *allergy*--etiology--et; article; caucasian; clinical article; haplotype; hay fever--etiology--et; human; human tissue; priority journal; ragweed; restriction fragment length polymorphism

14/3,K/26 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

00293234 EMBASE No: 1975065554
Immunogenic properties of modified antigen E. I. Presence of specific determinants for T cells in denatured antigen and polypeptide chains
Ishizaka K.; Kishimoto T.; Delespesse G.; King T.P.
Dept. Med., Johns Hopkins Univ. Sch. Med., Good Samaritan Hosp., Baltimore, Md. 21239 United States
Journal of Immunology (J. IMMUNOL.) 1974, 113/1 (70-77)
CODEN: JOIMA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Denaturation of *antigen* *E* in 8 M urea or by reduction carboxymethylation treatment resulted in loss of antigenic determinants in native molecules. The denatured antigen preparations, as well as...

...the antigen upon its dissociation, failed to combine with rabbit or human IgG antibody against the native antigen, or to induce erythema wheal reactions in *ragweed* sensitive individuals. The denatured antigens and the polypeptide chains, however, enhanced anti DNP antibody response of DNP *ragweed* (DNP Rag) primed rabbit lymph node cells to DNP keyhole limpet hemocyanin (KLH). When the primed lymph node cells were treated with DNP KLH for...

...The activity of the modified antigens to stimulate carrier specific helper cells was comparable to that of native antigen. All of the modified antigens induced *DNA* synthesis of peripheral lymphocytes of *ragweed* sensitive patients but not the lymphocytes of normal individuals. The results indicated that denatured *antigen* *E* as well as alpha and beta polypeptide chains possess determinants specific for T cell receptor.
MEDICAL DESCRIPTORS:
*t lymphocyte; **allergy*; *lymphocyte transformation; *skin test
?ds

Set	Items	Description
S1	5740	((DNA OR GENETIC) (W) VACCINE?) OR (GENE (W) IMMUNIZATION)
S2	97	S1 (S) (ALLERGY OR ALLERGEN OR ALLERGIC)
S3	54	RD (unique items)
S4	11	S3 AND REVIEW
S5	43	S3 NOT S4
S6	0	S5 AND (RAGWEED OR (AMB (W) A1) OR (ANTIGEN (W) E))
S7	6018	(AMB (W) A1) OR (RAGWEED) OR (ANTIGEN (W) E)
S8	137	S7 (S) (DNA OR VECTOR)
S9	0	S8 AND (HEMAGGLUTININ (W) A (W) SIGNAL (W) SEQUENCE)
S10	0	S8 AND (HA OR HEMAGGLUTININ)
S11	44	S8 AND (ALLERGY OR ALLERGIC)
S12	27	RD (unique items)
S13	1	S12 AND ((SIGNAL OR LEADER)(W) (SEQUENCE OR PEPTIDE))
S14	26	S12 NOT S13

?s (HA or (hemagglutinin (w) A)) (s) ((signal or leader) (w) sequence or peptide))
>>>Unmatched parentheses
?s (HA or (hemagglutinin (w) A)) (s) ((signal or leader) (w) (sequence or peptide))
Processing
Processing
100821 HA

```
          21870  HEMAGGLUTININ
       19905490  A
            181  HEMAGGLUTININ(W)A
         570600  SIGNAL
          21287  LEADER
        1348254  SEQUENCE
         634352  PEPTIDE
     S15     145  (HA OR (HEMAGGLUTININ (W) A)) (S) ((SIGNAL OR LEADER) (W)
                  (SEQUENCE OR PEPTIDE))
?s s15 and ((enhanced or increased) (w) (secretion or expression))
             145  S15
          634616  ENHANCED
         3020630  INCREASED
          603178  SECRETION
         1729457  EXPRESSION
           50651  (ENHANCED OR INCREASED)(W)(SECRETION OR EXPRESSION)
     S16       0  S15 AND ((ENHANCED OR INCREASED) (W) (SECRETION OR
                  EXPRESSION))
?s s15 and review
             145  S15
         1306038  REVIEW
     S17       0  S15 AND REVIEW
?s s15 and reviews
             145  S15
           92347  REVIEWS
     S18       0  S15 AND REVIEWS
?s s15 and (substitution or deletion or replacement)
             145  S15
          185181  SUBSTITUTION
          211199  DELETION
          255251  REPLACEMENT
     S19      11  S15 AND (SUBSTITUTION OR DELETION OR REPLACEMENT)
?rd
...completed examining records
     S20       6  RD (unique items)
?t s20/3,k/all
```

20/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

12814483 21561210 PMID: 11704269

Analysis of apicoplast targeting and transit peptide processing in Toxoplasma gondii by deletional and insertional mutagenesis.

Yung S; Unnasch T R; Lang-Unnasch N

Division of Geographic Medicine, BBRB 203, University of Alabama at Birmingham, 1530 3rd Avenue South, Birmingham, AL 35294-2170, USA.

Molecular and biochemical parasitology (Netherlands) Nov 2001, 118 (1) p11-21, ISSN 0166-6851 Journal Code: 8006324

Contract/Grant No.: RO1 AI 48737; AI; NIAID

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Deletion and insertion mutagenesis was used to analyze the targeting sequence of the nuclear encoded apicoplast protein, the ribosomal protein small subunit 9 of Toxoplasma gondii. Previous studies have shown that nuclear encoded apicoplast proteins possess bipartite leaders having characteristic signal sequences followed by serine/threonine rich transit sequences. *Deletion* analysis demonstrated that the first 55 amino acids of the rps9 leader were sufficient for apicoplast targeting. Insertional mutagenesis tagging the *leader* *sequence* with a hemagglutinin (*HA*) tag was used to study the events involved in the targeting pathway. Transfectants with insertions near the N-terminus of the transit displayed *HA* tagged precursors outside of the apicoplast, in the perinuclear region. In contrast, transfectants with the *HA* tag inserted near the

carboxyl end of the t[redacted]sit-like region had apicoplast [redacted]beling. Western blot analysis of *HA* tagged stable isolates suggested that processing of the *HA* tagged leaders was a multi-step process, with processing occurring both outside of and at or within the apicoplast.
; Blotting, Western; Cell Line; Electroporation; Gene *Deletion*; Microscopy, Fluorescence; Mutagenesis, Insertional; Peptides--genetics--GE; Plasmids--genetics--GE; Protein Subunits; Protein Transport; Protozoan Proteins--genetics--GE; Ribosomal Proteins--genetics--GE; Toxoplasma --growth and...

20/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05928967 89010523 PMID: 2459295
Defective presentation to class I-restricted cytotoxic T lymphocytes in vaccinia-infected cells is overcome by enhanced degradation of antigen.
Townsend A; Bastin J; Gould K; Brownlee G; Andrew M; Coupar B; Boyle D; Chan S; Smith G
Institute for Molecular Medicine, John Radcliffe Hospital, Headington, Oxford.
Journal of experimental medicine (UNITED STATES) Oct 1 1988, 168 (4) p1211-24, ISSN 0022-1007 Journal Code: 2985109R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Vaccinia infection interferes with the presentation of influenza Haemagglutinin (*HA*) and Nucleoprotein (NP) to class I-restricted CTL. The inhibitory effect is selective for certain epitopes, and is more profound during the late phase of...

... COOH-terminal epitope defined by peptide 366-379, having no detectable effect on the presentation of the NH2-terminal epitope 50-63. The presentation of *HA* is inhibited only during the late phase of vaccinia infection. For both proteins, presentation is partially (NP) or completely (*HA*) restored by expression of rapidly degraded protein fragments in the vaccinia infected target cell. For *HA*, *deletion* of the NH2-terminal *signal* *sequence* completely overcomes the block. For NP, either a large NH2-terminal *deletion* or the construction of a rapidly degraded ubiquitin-NP fusion protein partially restores presentation. These results illustrate the relationship between degradation of viral proteins in...

20/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04249303 83221636 PMID: 6304718
Defects in functional expression of an influenza virus hemagglutinin lacking the signal peptide sequences.
Sekikawa K; Lai C J
Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Jun 1983, 80 (12) p3563-7, ISSN 0027-8424 Journal Code: 7505876
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

We have investigated the requirement of the *signal* *sequence* for expression of influenza virus hemagglutinin (*HA*). For this purpose we used a recombinant prepared from a late-region *deletion* mutant of simian virus 40 (SV40) and cloned influenza *HA* DNA; the influenza DNA was inserted into the late region of SV40 previously occupied by the deleted sequences coding for SV40 capsid proteins. A simple in-phase *deletion* was

made in the *HA* DNA, resulting in loss of 11 internal amino acids from the 16 amino acid *signal* *peptide*. This *deletion* *HA* recombinant was then used to infect African green monkey kidney cells. Mutant *HA* was not detected on the cell surface but stably accumulated in the cytoplasm at a level similar to that of wild-type *HA* . NaDodSO4/polyacrylamide gel analysis of lysates from infected cells showed that mutant *HA* was not glycosylated. Significantly, the amount of mutant *HA* synthesized was not affected by tunicamycin. In contrast, wild-type *HA* was decreased more than 90% by tunicamycin. These findings suggest that mutant polypeptide is synthesized on free polyribosomes rather than on membrane-bound polyribosomes. The mutant *HA* failed to agglutinate erythrocytes, probably due to a defect directly or indirectly associated with the lack of carbohydrate side chains.

20/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04075426 83062920 PMID: 7144911
Construction of influenza haemagglutinin genes that code for intracellular and secreted forms of the protein.
Gething M J; Sambrook J
Nature (ENGLAND) Dec 16 1982, 300 (5893) p598-603, ISSN 0028-0836
Journal Code: 0410462
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The DNA sequences encoding the amino-terminal *signal* *peptide* or the carboxy-terminal hydrophobic anchor have been deleted from a cloned gene coding for the haemagglutinin (*HA*) of influenza virus. The wild-type gene has previously been shown to be expressed with high efficiency from simian virus 40 (SV40)-*HA* recombinant vectors into a fully glycosylated protein that is displayed on the infected cell's surface in an antigenically and biologically active form. The anchor-minus *HA* also is glycosylated but is secreted efficiently into the medium. By contrast, the signal-minus *HA* is produced only at low levels, is not glycosylated and is located intracellularly.
; Cell Compartmentation; Chromosome *Deletion*; DNA, Viral--genetics--GE; Gene Expression Regulation; Genes, Structural; Glycoproteins--biosynthesis --BI; Molecular Weight; Peptides--genetics--GE; Protein Sorting Signals

20/3,K/5 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13049553 BIOSIS NO.: 200100256702
Novel insights into the molecular mechanism of glycoprotein hormone receptor activation.
AUTHOR: Fremont Valerie(a); Zhang Meng(a); Weintraub Bruce D(a); Szkudlinski Mariusz W(a)
AUTHOR ADDRESS: (a)University of Maryland, 725 West Lombard Street, Baltimore, MD, 21201**USA
JOURNAL: FASEB Journal 15 (4):pA175 March 7, 2001
MEDIUM: print
CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001
ISSN: 0892-6638
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

...ABSTRACT: we have tested several new TSHR constructs with major

Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
******** HHHHHHHH SSSSSSSS?
Status: Signing onto Dialog
****
ENTER PASSWORD:
******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 02.17.00D

Last logoff: 15jul03 13:34:41
Logon file001 18jul03 15:16:05
*** ANNOUNCEMENT ***
***
--File 654 - US published applications from March 15, 2001 to the present are now online. Please see HELP NEWS 654 for details.

***
--File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

***
--File 156 - The 2003 annual reload of ToxFile is complete. Please see HELP NEWS156 for details.

***
--File 990 - NewsRoom now contains February 2003 to current records. File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest months's records roll out of File 990 and into File 992 on the first weekend of each month. To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.
***
--Connect Time joins DialUnits as pricing options on Dialog. See HELP CONNECT for information.
***
***
--SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.
***
--Important news for public and academic libraries. See HELP LIBRARY for more information.
***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
***
NEW FILES RELEASED
***World News Connection (File 985)
***Dialog NewsRoom - 2003 Archive (File 992)
***TRADEMARKSCAN-Czech Republic (File 680)
***TRADEMARKSCAN-Hungary (File 681)
***TRADEMARKSCAN-Poland (File 682)
***
UPDATING RESUMED
***
RELOADED
***Population Demographics -(File 581)

```
***CLAIMS Citation (Files [redacted]0-222)

REMOVED
                    ***

      >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
      >>>    of new databases, price changes, etc.       <<<
                    ****
KWIC is set to 50.
HILIGHT set on as '*'
* * * * See HELP NEWS 225 for information on new search prefixes
and display codes

***                                        ***


File   1:ERIC  1966-2003/Jul 15
       (c) format only 2003 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155, 159, 5, 73
       18jul03 15:16:22 User259876 Session D525.1
            $0.32    0.090 DialUnits File1
     $0.32  Estimated cost File1
     $0.06  TELNET
     $0.38  Estimated cost this search
     $0.38  Estimated total session cost   0.090 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2003/Jul W2
        (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.
  File 159:Cancerlit  1975-2002/Oct
        (c) format only 2002 Dialog Corporation
*File 159: Cancerlit ceases updating with immediate effect.
Please see HELP NEWS.
  File   5:Biosis Previews(R)  1969-2003/Jul W2
        (c) 2003 BIOSIS
  File  73:EMBASE  1974-2003/Jul W2
        (c) 2003 Elsevier Science B.V.
*File  73: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.

      Set  Items  Description
      ---  -----  -----------
?s (signal or leader) (w) (sequence or peptide)
         660262  SIGNAL
          23365  LEADER
        1529403  SEQUENCE
         695391  PEPTIDE
      S1  43865  (SIGNAL OR LEADER) (W) (SEQUENCE OR PEPTIDE)
?s s1 (s) (heterologous or deletion or modified or replaced or deleted)
          43865  S1
          97675  HETEROLOGOUS
         249125  DELETION
         470914  MODIFIED
         126922  REPLACED
          53757  DELETED
      S2   6420  S1 (S) (HETEROLOGOUS OR DELETION OR MODIFIED OR REPLACED
                 OR DELETED)
?s s2 (s) (hemagglutinin (w) A)
Processing
Processing
```

```
          6420  S2
         23119  HEMAGGLUTININ
      21940565  A
    S3       0  S2 (S) (HEMAGGLUTININ (W) A)
?s s2 (s) (allergen)
          6420  S2
         55223  ALLERGEN
    S4       6  S2 (S) (ALLERGEN)
?rd
...completed examining records
    S5       3  RD (unique items)
?t s5/3,k/all
```

5/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14236013 22094979 PMID: 12100052

High-level expression of recombinant house dust mite allergen Der p 1 in Pichia pastoris.

Jacquet A; Magi M; Petry H; Bollen A; et al

Department of Applied Genetics, Universite Libre de Bruxelles, Belgium. ajacquet@sga.ulb.ac.be

Clinical and experimental allergy - journal of the British Society for Allergy and Clinical Immunology (England) Jul 2002, 32 (7) p1048-53, ISSN 0954-7894 Journal Code: 8906443

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

BACKGROUND: The major house dust mite Der p 1 *allergen* is associated with allergic disease. *Heterologous* over-expression of biologically active Der p 1 was previously attempted but with limited success. OBJECTIVE: The aim of this study was to establish an...

...of recombinant Der p 1. METHODS: The proform of Der p 1 was expressed in Pichia pastoris as a fusion with the alpha mating factor *signal* *sequence* . The recombinant product was purified from culture medium and compared to Der p 1 isolated from mite culture, in terms of enzymatic activity as well...

... This efficient system for recombinant Der p 1 expression leads the way for the design of new diagnostics for house dust mite allergy, epitope mapping, *allergen* engineering, structural and immunological studies and new immunotherapeutic treatments.

5/3,K/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

11471959 98355670 PMID: 9692921

cDNA cloning of the 43-kDa latex allergen Hev b 7 with sequence similarity to patatins and its expression in the yeast Pichia pastoris.

Sowka S; Wagner S; Krebitz M; Arija-Mad-Arif S; Yusof F; Kinaciyan T; Brehler R; Scheiner O; Breiteneder H

Department of General and Experimental Pathology, University Hospital, Vienna, Austria.

European journal of biochemistry / FEBS (GERMANY) Jul 1 1998, 255 (1) p213-9, ISSN 0014-2956 Journal Code: 0107600

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... particularly in latex gloves, has become an important public health

problem in recent years. We purified natural Hev b 7, a 43-kDa patatin-like *allergen* from the latex of Hevea brasiliensis and determined several internal peptide sequences. A *heterologous* hybridization probe of a patatin gene of potato, to which these peptides could be aligned best, was used to screen a latex cDNA library. The...
... from sera of latex-sensitized allergic individuals. In contrast to patatins from S. tuberosum and Nicotiana tabacum, natural Hev b 7 lacked an N-terminal *leader* *peptide* for targeting to the endoplasmatic reticulum and was not glycosylated. These results establish the 43-kDa patatin-like protein as a latex *allergen* and raise the possibility of different cellular localization and function compared to S. tuberosum patatins.

5/3,K/3 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11581442 BIOSIS NO.: 199800362138
cDNA cloning of the 43-kDa latex allergen Hev b 7 with sequence similarity to patients and its expression in the yeast Pichia pastoris.
AUTHOR: Sowka Slawomir; Wagner Stefan; Krebitz Monika; Arija-Mad-Arif Siti; Yusof Faridah; Kinaciyan Tamar; Brehler Randolf; Scheiner Otto; Breiteneder Heimo(a)
AUTHOR ADDRESS: (a)Dep. General Experimental Pathol., University Hosp., AKH-EBO-3Q, Waehringer Guertel 18-20, A-109**Austria
JOURNAL: European Journal of Biochemistry 255 (1):p213-219 July, 1998
ISSN: 0014-2956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: particularly in latex gloves, has become an important public health problem in recent years. We purified natural Hev b 7, a 43-kDa patatin-like *allergen* from the latex of Hevea brasiliensis and determined several internal peptide sequences. A *heterologous* hybridization probe of a patatin gene of potato. to which these peptides could be aligned best, was used to screen a latex cDNA library. The...
...from sera of latex-sensitized allergic individuals. In contrast to patatins from S. tuberosum and Nicotiana tabacum, natural Hev b 7 lacked an N-terminal *leader* *peptide* for targeting to the endoplasmatic reticulum and was not glycosylated. These results establish the 43-kDa patatin-like protein as a latex *allergen* and raise the possibility of different cellular localization and function compared to S. tuberosum patatins.
?ds

Set	Items	Description
S1	43865	(SIGNAL OR LEADER) (W) (SEQUENCE OR PEPTIDE)
S2	6420	S1 (S) (HETEROLOGOUS OR DELETION OR MODIFIED OR REPLACED OR DELETED)
S3	0	S2 (S) (HEMAGGLUTININ (W) A)
S4	6	S2 (S) (ALLERGEN)
S5	3	RD (unique items)

```
?s s2 and (allergen)
            6420  S2
           55223  ALLERGEN
      S6       6  S2 AND (ALLERGEN)
?rd
...completed examining records
      S7       3  RD (unique items)
?s s7 not s5
               3  S7
               3  S5
      S8       0  S7 NOT S5
?s s2 and (ragweed or pollen or (Amb (w) a1))
            6420  S2
            5713  RAGWEED
```

```
          64039  POLLEN
           3281  AMB
          59399  A1
              2  AMB(W)A1
     S9       8  S2 AND (RAGWEED OR POLLEN OR (AMB (W) A1))
?rd
...completed examining records
     S10      3  RD (unique items)
?t s10/3,k/all
```

10/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

09474883 21249161 PMID: 11351087

Expression and processing of a hormonally regulated beta-expansin from soybean.

Downes B P; Steinbaker C R; Crowell D N

Department of Biology, Indiana University-Purdue University Indianapolis, 723 West Michigan Street, Indianapolis, Indiana 46202-5132, USA.

Plant physiology (United States) May 2001, 126 (1) p244-52, ISSN 0032-0889 Journal Code: 0401224

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... essential components of acid-induced cell wall loosening in plants. Beta-expansins, which constitute a subfamily of related expansin proteins, include the group I grass *pollen* allergens. To provide a better description of beta-expansin expression, we have characterized a cytokinin-inducible beta-expansin from soybean (Glycine max cv Mandarin) called...

... Furthermore, the identical amino termini of the 35- and 20-kD forms of Cim1 correspond to a position 11 amino acids downstream of the predicted *signal* *sequence* cleavage site, suggesting proteolysis of a short amino terminal propeptide after removal of the *signal* *peptide* . This propeptide fragment contains a consensus site for N-glycosylation and our data suggest that it is glycosylated by a tunicamycin-sensitive mechanism in cultured...

... Cim1 is rapidly and specifically proteolyzed as soybean cultures reach stationary phase. These findings are consistent with the hypothesis that beta-expansin proteins are extensively *modified* by post-translational N-glycosylation and proteolysis.

10/3,K/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

08398395 95086374 PMID: 7994172

A plant plasma membrane proton-ATPase gene is regulated by development and environment and shows signs of a translational regulation.

Michelet B; Lukaszewicz M; Dupriez V; Boutry M

Unite de Biochimie Physiologique, Universite Catholique de Louvain, Louvain-la-Neuve, Belgium.

Plant cell (UNITED STATES) Oct 1994, 6 (10) p1375-89, ISSN 1040-4651 Journal Code: 9208688

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... of the reproductive organs where active transport is thought to occur but where scarcely any ATPase activity has been identified, namely in the

tapetum, the *pollen*, th[redacted]ransmitting tissue, and the ov[redacted]s. Several pma genes have a long 5'untranslated region (*leader* *sequence*) containing an upstream open reading frame (URF). Analysis of translational and transcriptional fusions with gusA in transgenic plants suggests that the pma1 *leader* *sequence* might activate translation of the main open reading frame, even though the URF is translated by a large majority of the scanning ribosomes. As confirmation, transient expression experiments showed that the pma1 leader causes a fourfold post-transcriptional increase of main open reading frame expression. *Deletion* of the URF by site-directed mutagenesis stimulated the main open reading frame translation 2.7-fold in an in vitro translational assay. These results...

10/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07305018 92167963 PMID: 1311405
Transactivation of Ds by Ac-transposase gene fusions in tobacco.
Rommens C M; van Haaren M J; Buchel A S; Mol J N; van Tunen A J; Nijkamp H J; Hille J
Free University, Department of Genetics, Amsterdam, The Netherlands.
Molecular & general genetics - MGG (GERMANY) Feb 1992, 231 (3) p433-41, ISSN 0026-8925 Journal Code: 0125036
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

To study regulation of the (Ds) transposition process in *heterologous* plant species, the transposase gene of Ac was fused to several promoters that are active late during plant development. These promoters are the flower-specific chalcone synthase A promoter (CHS A), the anther-specific chalcone isomerase B promoter CHI B and the *pollen*-specific chalcone isomerase A2 promoter CHI A2. The *modified* transposase genes were introduced into a tobacco tester plant. This plant contains Ds stably inserted within the *leader* *sequence* of the hygromycin resistance (HPT II) gene. As confirmed with positive control elements, excision of Ds leads to the restoration of a functional HPT II...

...of transposase gene fusions in calli, excision in regenerated plants was observed only for the CHS A- or CHI B-transposase gene fusions. With these *modified* transposase genes, somatic excision frequencies were increased (68%) and decreased (22%), respectively, compared to the situation with the Ac element itself (38%). The shifts in...
?ds

Set	Items	Description
S1	43865	(SIGNAL OR LEADER) (W) (SEQUENCE OR PEPTIDE)
S2	6420	S1 (S) (HETEROLOGOUS OR DELETION OR MODIFIED OR REPLACED OR DELETED)
S3	0	S2 (S) (HEMAGGLUTININ (W) A)
S4	6	S2 (S) (ALLERGEN)
S5	3	RD (unique items)
S6	6	S2 AND (ALLERGEN)
S7	3	RD (unique items)
S8	0	S7 NOT S5
S9	8	S2 AND (RAGWEED OR POLLEN OR (AMB (W) A1))
S10	3	RD (unique items)

?s (allergen or ragweed or pollen or (antigen (w) E)) (s) (hemagglutinin (w) A)
Processing
Processing

55223	ALLERGEN
5713	RAGWEED
64039	POLLEN
1103095	ANTIGEN
1702581	E

```
          1230  ANTIGEN(W)E
         23119  HEMAGGLUTININ
      21940565  A
   S11       0  (ALLERGEN OR RAGWEED OR POLLEN OR (ANTIGEN (W) E)) (S)
                (HEMAGGLUTININ (W) A)
?s (allergen or ragwee or pollen or (antigen (w) E)) and (hemagglutinin (w) A)
Processing
Processing
         55223  ALLERGEN
             1  RAGWEE
         64039  POLLEN
       1103095  ANTIGEN
       1702581  E
          1230  ANTIGEN(W)E
         23119  HEMAGGLUTININ
      21940565  A
           198  HEMAGGLUTININ(W)A
   S12       0  (ALLERGEN OR RAGWEE OR POLLEN OR (ANTIGEN (W) E)) AND
                (HEMAGGLUTININ (W) A)
?ds

Set     Items   Description
S1      43865   (SIGNAL OR LEADER) (W) (SEQUENCE OR PEPTIDE)
S2       6420   S1 (S) (HETEROLOGOUS OR DELETION OR MODIFIED OR REPLACED OR
             DELETED)
S3          0   S2 (S) (HEMAGGLUTININ (W) A)
S4          6   S2 (S) (ALLERGEN)
S5          3   RD (unique items)
S6          6   S2 AND (ALLERGEN)
S7          3   RD (unique items)
S8          0   S7 NOT S5
S9          8   S2 AND (RAGWEED OR POLLEN OR (AMB (W) A1))
S10         3   RD (unique items)
S11         0   (ALLERGEN OR RAGWEED OR POLLEN OR (ANTIGEN (W) E)) (S) (HE-
              MAGGLUTININ (W) A)
S12         0   (ALLERGEN OR RAGWEE OR POLLEN OR (ANTIGEN (W) E)) AND (HEM-
              AGGLUTININ (W) A)
?s (allergen or ragweed or pollen or (antigen (w) E)) (s) (chimeric or fusion or modifi
ed)
         55223  ALLERGEN
          5713  RAGWEED
         64039  POLLEN
       1103095  ANTIGEN
       1702581  E
          1230  ANTIGEN(W)E
         64354  CHIMERIC
        277040  FUSION
        470914  MODIFIED
   S13    2970  (ALLERGEN OR RAGWEED OR POLLEN OR (ANTIGEN (W) E)) (S)
                (CHIMERIC OR FUSION OR MODIFIED)
?s s13 and s1
          2970  S13
         43865  S1
   S14      53  S13 AND S1
?rd
...examined 50 records  (50)
...completed examining records
   S15      21  RD (unique items)
?t s15/3,k/all

 15/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14236013   22094979   PMID: 12100052
  High-level expression of recombinant house dust mite allergen Der p 1 in
Pichia pastoris.
```

Jacquet A; Magi M; Pet[redacted]H; Bollen A; et al
Department of Applied Genetics, Universite Libre de Br[redacted]elles, Belgium. ajacquet@sga.ulb.ac.be
Clinical and experimental allergy - journal of the British Society for Allergy and Clinical Immunology (England) Jul 2002, 32 (7) p1048-53, ISSN 0954-7894 Journal Code: 8906443
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

BACKGROUND: The major house dust mite Der p 1 *allergen* is associated with allergic disease. Heterologous over-expression of biologically active Der p 1 was previously attempted but with limited success. OBJECTIVE: The aim of...

... an efficient system for the production of recombinant Der p 1. METHODS: The proform of Der p 1 was expressed in Pichia pastoris as a *fusion* with the alpha mating factor *signal* *sequence*. The recombinant product was purified from culture medium and compared to Der p 1 isolated from mite culture, in terms of enzymatic activity as well...

... This efficient system for recombinant Der p 1 expression leads the way for the design of new diagnostics for house dust mite allergy, epitope mapping, *allergen* engineering, structural and immunological studies and new immunotherapeutic treatments.

15/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

14088430 22049089 PMID: 12054353
Expression of biotin-binding proteins, avidin and streptavidin, in plant tissues using plant vacuolar targeting sequences.
Murray Colleen; Sutherland Paul W; Phung Margaret M; Lester Melissa T; Marshall Richelle K; Christeller John T; et al
The Horticulture and Food Research Institute of New Zealand, Palmerston North Research Centre.
Transgenic research (Netherlands) Apr 2002, 11 (2) p199-214, ISSN 0962-8819 Journal Code: 9209120
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...plants have been developed which constitutively express high levels of the biotin-binding proteins, avidin and streptavidin. These plants were phenotypically normal and produced fertile *pollen* and seeds. The transgene was expressed and its product located in the vacuoles of most cell types in the plants. Targeting was achieved by use...

...located in protein body-like structures within the vacuole and transgene protein levels remained relatively constant throughout the lifetime of the leaf. We describe two *chimeric* constructs with similar levels of expression. One comprised a potato proteinase inhibitor I *signal* *peptide* cDNA sequence attached to an avidin cDNA and the second a potato proteinase inhibitor II *signal* *peptide* genomic sequence (including an intron) attached to a core streptavidin synthetic sequence. We were unable to regenerate plants when transformation used constructs lacking the targeting...

15/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11929460 99373137 PMID: 10441484

Characterization of a novel allergen, a major IgE-binding protein from Aspergillus flavus, as an alkaline serine protease.

Yu C J; Chiou S H; Lai W Y; Chiang B L; Chow L P

Institute of Biochemistry, College of Medicine, National Taiwan University, Institute of Biological Chemistry, Academia, Taipei, Taiwan.

Biochemical and biophysical research communications (UNITED STATES) Aug 11 1999, 261 (3) p669-75, ISSN 0006-291X Journal Code: 0372516

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Aspergillus species of fungi have been known to be one of the most prevalent aeroallergens. One important A. flavus *allergen* (Asp fl 1) was identified by means of immunoblotting with a serum pool of allergic patients on a two-dimensional electrophoretic gel. The cDNA coding...

... 1 was cloned and sequenced. The clone encodes a full-length protein of 403 amino acid precursors of 42 kDa. After cleavage of a putative *signal* *peptide* of 21 amino acids and a prepeptide of 100 amino acids, a mature protein of 282 amino acids was obtained with a molecular mass of...

... and a pI of 6.3. A degree of identity was found in a range of 27 to 84% among related allergens derived from bacteria *allergen* subtilisin, mold *allergen* Pen c 1, and virulence factor of A. fumigatus. Recombinant Asp fl 1 (rAsp fl 1) was cloned into vector pQE-30 and expressed in E. coli M15 as a histidine-tag *fusion* protein and purified to homogeneity. The IgE binding capacity of rAsp fl 1 was tested by immunoblotting using a serum pool of Aspergillus-allergic patients. Recombinant *allergen* cross-reacted strongly with IgE specific for natural Asp fl 1 and Pen c 1, indicating that common IgE epitopes may exist between allergens of...

15/3,K/4 (Item 4 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

11881136 99322939 PMID: 10394635

A novel glycine-rich protein is associated with starch grain accumulation during anther development.

Mousavi A; Hiratsuka R; Takase H; Hiratsuka K; Hotta Y

Graduate School of Biological Sciences, Nara Institute of Science and Technology, Japan.

Plant & cell physiology (JAPAN) Apr 1999, 40 (4) p406-16, ISSN 0032-0781 Journal Code: 9430925

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

...a lily gene associated with microsporogenesis, encodes a protein which has two distinct domains, one with glycine-serine repeats and the other with a hydrophobic *signal* *peptide* at the N-terminus. The putative LIM14 protein, however, is distinct from the glycine-rich cell wall proteins which have been described before. RNA analyses indicated that the LIM14 transcript is specifically detected in the anther from zygotene to young *pollen* stage. By using antibodies raised against recombinant LIM14 protein, we detected anther-specific 15 kDa protein. Immunofluorescence microscopy demonstrated that the LIM14 protein is associated...

... starch grains in the anther wall cells just prior to microspore mitosis and then accumulates at a higher level with the starch grains of immature *pollen* . We tagged LIM14 with the GUS and GFP reporter genes and introduced them into tobacco BY-2 cells. Analysis of the transformed cells revealed that the *chimeric* proteins are functional and specifically targeted to plastids. These results indicate that LIM14 is an

anther-specific protein [redacted] at may play a role in starch [redacted] cumulation and amyloplast differentiation during anther development and *pollen* formation.

15/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11865500 99306854 PMID: 10377244
Identification and expression of Pen c 2, a novel allergen from Penicillium citrinum.
Chow L P; Su N Y; Yu C J; Chiang B L; Shen H D
Institute of Biochemistry, College of Medicine, National Taiwan University, No. 1, Jen-Ai Road, Taipei, Taiwan 100. lupin@ha.mc.ntu. edu.tw
Biochemical journal (ENGLAND) Jul 1 1999, 341 (Pt 1) p51-9, ISSN 0264-6021 Journal Code: 2984726R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The mould genus, Penicillium, is known to be a significant source of environmental aero-allergens. One important *allergen* from Penicillium citrinum, Pen c 2, has been identified by means of two-dimensional immunoblotting using IgE-containing patients' sera. This novel *allergen* was cloned, sequenced and expressed in Escherichia coli. The cloned cDNA encodes a large 457-amino acid protein precursor containing a 16-amino acid *signal* *peptide* , a 120-amino acid propeptide and the 321-amino acid mature protein. Comparison of the Pen c 2 sequence with known protein sequences revealed shared...

... Pen c 2. The DNA coding for Pen c 2 was cloned into vector PQE-30 and expressed in E. coli as a His-tag *fusion* protein that bound serum IgE from Penicillium-allergic patients on immunoblots. Recombinant Pen c 2 could therefore be used effectively for diagnosis and also potentially...

15/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11765548 99203508 PMID: 10103041
Pen c 1, a novel enzymic allergen protein from Penicillium citrinum. Purification, characterization, cloning and expression.
Su N Y; Yu C J; Shen H D; Pan F M; Chow L P
Institute of Biochemistry, College of Medicine, National Taiwan University, Taipei, Taiwan.
European journal of biochemistry / FEBS (GERMANY) Apr 1999, 261 (1) p115-23, ISSN 0014-2956 Journal Code: 0107600
Erratum in Eur J Biochem 1999 May;261(3) 821
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... bp in length and contains an open reading frame for a 397-amino-acid polypeptide. Pen c 1 codes for a larger precursor containing a *signal* *peptide* , a propeptide and the 33-kDa mature protein. Sequence comparison revealed that Pen c 1 possesses several features in common with the alkaline serine proteases...

... catalytic triad of serine proteases are well conserved. Northern blots demonstrated that mRNAs transcribed from this gene are present at early stages of culture. The *allergen* encoded by Pen c 1 gene was expressed in Escherichia coli as a *fusion* protein bearing an N-terminal histidine-affinity tag. The protein, purified by affinity chromatography

with a yield of 130 mg of pure protein per liter...

... allergic to Penicillium. Recombinant Pen c 1 can therefore be expressed in E. coli in large quantities and should prove useful as a standardized specific *allergen* for immuno-diagnosis of atopic disorders. In addition, full caseinolytic enzyme activity could be generated in the purified recombinant protein by sulfonation and renaturation, followed...

15/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11000879 97354187 PMID: 9210481
The complete cDNA sequence and expression of the first major allergenic protein of Malassezia furfur, Mal f 1.
Schmidt M; Zargari A; Holt P; Lindbom L; Hellman U; Whitley P; van der Ploeg I; Harfast B; Scheynius A
Department of Laboratory Medicine, Karolinska Hospital, Stockholm, Sweden.
European journal of biochemistry / FEBS (GERMANY) May 15 1997, 246 (1) p181-5, ISSN 0014-2956 Journal Code: 0107600
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

For the first time the complete cDNA encoding a major *allergen* and novel protein of the yeast Malassezia furfur, Mal f 1, has been sequenced and expressed. The amino acid sequences of nine tryptic peptides of...

... and a deduced amino acid sequence containing 350 residues. The hydropathy plot and the tryptic digest indicate that the first 22 amino acids represent a *leader* *sequence* determining a mature protein of 35 988 Da. The complete encoding cDNA was expressed as a maltose-binding protein *fusion* protein in Escherichia coli. The recombinant *fusion* protein reacted with our specific monoclonal antibody and with IgE from patients with atopic dermatitis.

15/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10897476 97249368 PMID: 9095254
Molecular characterization of Hor v 9. Conservation of a T-cell epitope among group IX pollen allergens and human VCAM and CD2.
Astwood J D; Hill R D
Monsanto Company, St. Louis, Missouri 63021, USA.
Advances in experimental medicine and biology (UNITED STATES) 1996, 409 p269-77, ISSN 0065-2598 Journal Code: 0121103
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

We have cloned, sequenced and expressed a recombinant group IX *pollen* *allergen* from barley (Hordeum vulgare). Hor v 9 is a polypeptide of 313 amino acids. The Hor v 9 cDNA clone was engineered into the E. coli protein expression vector pMAL and expressed as a *fusion* of maltose binding protein and truncated Hor v 9. Polyclonal antibodies to the *fusion* protein were raised in mice. Cross-reactive proteins, RNA and DNA homologues were found in many agricultural species including wheat, rye, triticale, oats, maize, sunflower...
... presence of group IX-like proteins in a variety of agricultural crops may represent a previously uncharacterized aeroallergenic occupational hazard. Sequence comparisons of the barley *allergen*, Hor v 9, with Poa p

9 and other cloned group[redacted] *pollen* allergens revealed p[redacted]tive structural domains common to all. These include a *signal* *peptide*, two conserved immunoglobulin-like motifs, a 150 amino acid highly conserved carboxyterminal domain and a carboxyterminal transmembrane helix. This structural arrangement is also found in...

... structural arrangement of group IX allergens and human cell adhesion molecules, as well as the presence of a T-cell epitope common to group IX *pollen* allergens and cell adhesion molecules, will have important consequences in the natural history of the atopic immune response.

15/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10786425 97136690 PMID: 8982067
Cloning and expression pattern of Hor v 9, the group 9 pollen isoallergen from barley.
Astwood J D; Hill R D
Department of Plant Science, Faculty of Agricultural and Food Sciences, University of Manitoba, Winnipeg, Canada.
Gene (NETHERLANDS) Dec 5 1996, 182 (1-2) p53-62, ISSN 0378-1119 Journal Code: 7706761
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

In this study we report the cloning, sequence, and characterization of Hor v 9 *allergen* cDNAs from barley (Hordeum vulgare) *pollen*. Structural homologues of Kentucky bluegrass (Poa pratensis) group 9 *pollen* allergens were identified in a cDNA library of barley *pollen* expressed mRNAs. The Hor v 9 cDNA clone (hvp9742) contained an open reading frame encoding 313 amino acids which included a putative 27-residue *signal* *peptide* and one asparagine sequon for glycosylation. The mRNA corresponding to clone hvp9742 was produced abundantly in *pollen* during the late stages of anther development. The protein encoded by clone hvp9742 was synthesized as a *fusion* protein in the E. coli expression vector pMAL. Immunoblots using antibodies to this recombinant *allergen*, rHor v 9, showed that Hor v 9 protein accumulated during *pollen* development and was produced maximally at *pollen* maturity. Using these antibodies, we also provide evidence that Hor v 9 protein localized to the extracellular matrix of mature *pollen*. Southern blots suggested that Hor v 9 allergens exist as multiple isoforms in barley. Sequence comparisons showed that the Hor v 9 cDNA clones were also homologous to group 5 allergens of Timothy grass (Phleum pratense) *pollen* and canary grass (Phalaris aquatica) *pollen*, and the group 9 *allergen* of ryegrass (Lolium perenne) *pollen*.

15/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10375887 96180991 PMID: 8605256
Molecular cloning and characterization of the major allergen Myr p II from the venom of the jumper ant Myrmecia pilosula: Myr p I and Myr p II share a common protein *leader* *sequence*.
Street M D; Donovan G R; Baldo B A
Molecular Immunology Unit, Kolling Institute of Medical Research, Royal North Shore Hospital of Sydney, St. Leoonards, NSW, Australia.
Biochimica et biophysica acta (NETHERLANDS) Feb 7 1996, 1305 (1-2) p87-97, ISSN 0006-3002 Journal Code: 0217513
Erratum in Biochim Biophys Acta 1996 Jul 15;1307(3) 351
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM

Record type: Completed

... major allergen Myr p II from the venom of the jumper ant Myrmecia pilosula: Myr p I and Myr p II share a common protein *leader* *sequence*.

A major *allergen* Myr p II of the Australian jumper ant Myrmecia pilosula has been cloned, immunocharacterized and nucleotide sequenced. An open reading frame of 225 bases was identified and found to encode a deduced amino acid sequence of 75 residues which contained a typical hydrophobic peptide *leader* *sequence*. Expressed *fusion* proteins of Myr p II in both phage and plasmid vectors bind high levels of ant venom-specific IgE and the expressed clones are recognised...

... native venom after separation by SDS-PAGE. The amino acid sequence of Myr p II shares close structural homology with the other major jumper ant *allergen* Myr p I, differing by only three amino acids in the first 47 residues of both sequences. However, N-terminal analysis of IgE-binding bands...

15/3,K/11 (Item 11 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

10318558 96120794 PMID: 8556554

Molecular cloning and immunological characterization of the house dust mite allergen Der f 7.

Shen H D; Chua K Y; Lin W L; Hsieh K H; Thomas W R

Department of Medical Research, Veterans General Hospital-Taipei, Taiwan, Republic of China.

Clinical and experimental allergy - journal of the British Society for Allergy and Clinical Immunology (ENGLAND) Oct 1995, 25 (10) p1000-6, ISSN 0954-7894 Journal Code: 8906443

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

BACKGROUND: The *allergen* Der p 7 from Dermatophagoides pteronyssinus has been defined by molecular cloning and shown to be an important specificity in 50% of mite-allergic patients...

... 7 from D. farinae with Der p 7. METHOD: cDNA encoding Der f 7 was amplified by polymerase chain reaction, sequenced and expressed as a *fusion* with glutathione-S-transferase for IgE and monoclonal antibody binding studies. RESULTS: Der f 7 cDNA encoded a 213 polypeptide containing a predicted 17 amino acid *leader* *sequence*, no cysteines and a single N-glycosylation site similar to Der p 7. The predicted 196 residue mature polypeptide had 86% identity to Der p 7 and a calculated molecular weight of 22,348Da. No homologues were found in searches of the data banks. The Der f 7 *fusion* protein showed a single band of 46 kDa by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and reacted with IgE antibodies in 19/41...

15/3,K/12 (Item 12 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

09474883 21249161 PMID: 11351087

Expression and processing of a hormonally regulated beta-expansin from soybean.

Downes B P; Steinbaker C R; Crowell D N

Department of Biology, Indiana University-Purdue University Indianapolis, 723 West Michigan Street, Indianapolis, Indiana 46202-5132, USA.

Plant physiology (United States) May 2001, 126 (1) p244-52, ISSN 0032-0889 Journal Code: 0401224

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... essential components of acid-induced cell wall loosening in plants. Beta-expansins, which constitute a subfamily of related expansin proteins, include the group I grass *pollen* allergens. To provide a better description of beta-expansin expression, we have characterized a cytokinin-inducible beta-expansin from soybean (Glycine max cv Mandarin) called...

... Furthermore, the identical amino termini of the 35- and 20-kD forms of Cim1 correspond to a position 11 amino acids downstream of the predicted *signal* *sequence* cleavage site, suggesting proteolysis of a short amino terminal propeptide after removal of the *signal* *peptide* . This propeptide fragment contains a consensus site for N-glycosylation and our data suggest that it is glycosylated by a tunicamycin-sensitive mechanism in cultured...

... Cim1 is rapidly and specifically proteolyzed as soybean cultures reach stationary phase. These findings are consistent with the hypothesis that beta-expansin proteins are extensively *modified* by post-translational N-glycosylation and proteolysis.

15/3,K/13 (Item 13 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09456874 21229291 PMID: 11329455
Induction of mucosal immune response after intranasal or oral inoculation of mice with Lactococcus lactis producing bovine beta-lactoglobulin.
Chatel J M; Langella P; Adel-Patient K; Commissaire J; Wal J M; Corthier G
Unite d'Immuno-Allergie Alimentaire INRA-CEA, Service de Pharmacologie et d'Immunologie, Bat 136 CEA Saclay, 91191 Gif sur Yvette, France.
Clinical and diagnostic laboratory immunology (United States) May 2001, 8 (3) p545-51, ISSN 1071-412X Journal Code: 9421292
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The bovine beta-lactoglobulin (BLG) is a major cow's milk *allergen*. Here, we evaluated the immune response against BLG induced in mice, using the organism Lactococcus lactis, which has GRAS ("generally regarded as safe") status, as...

... majority of rBLG remained in the cytoplasm, the highest yield (2 microg per ml of culture) was obtained with a secreting strain that encodes a *fusion* between a lactococcal *signal* *peptide* and rBLG. Whatever the expression system, the rBLG is produced mostly in a soluble, intracellular, and denatured form. The BLG-producing strains were then administered...

... IgG1, or IgG2a was detected in sera of mice. These recombinant lactococcal strains constitute good vehicles to induce a mucosal immune response to a model *allergen* and to better understand the mechanism of allergy induced by BLG.

15/3,K/14 (Item 14 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09401123 21167388 PMID: 11267676
Cloning of cDNA encoding a soybean allergen, Gly m Bd 28K.
Tsuji H; Hiemori M; Kimoto M; Yamashita H; Kobatake R; Adachi M; Fukuda T

; Bando N; Okita M; Utsum[redacted]
Department of Nutritional Science, Faculty of Health and Welfare Science, Okayama Prefectural University, Juboki 111, Soja 719-1197, Japan. htsuji@fhw.oka-pu.ac.jp
Biochimica et biophysica acta (Netherlands) Mar 19 2001, 1518 (1-2) p178-82, ISSN 0006-3002 Journal Code: 0217513
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

A cDNA clone encoding a soybean *allergen* , Gly m Bd 28K, has been isolated. The clone has a 1567-bp cDNA insert with a 1419-bp open reading frame and a 148...

... reading frame was shown to encode a polypeptide composed of 473 amino acids. The chemically determined amino acid sequences of the peptides obtained from the *allergen*, including its N-terminal peptide, were shown to be contained in the N-terminal region of the amino acid sequence deduced from the cDNA, showing that the first half of the cDNA encodes the *allergen* with a preceding segment of 21 amino acids. The peptide fragment including the *allergen* was expressed as a *fusion* protein with glutathione S-transferase in Escherichia coli and immunoblotted with the sera of soybean-sensitive patients and the monoclonal antibody against the *allergen*. Furthermore, homology analyses demonstrate that the polypeptide for the cDNA exhibits high homology with the MP27/MP32 proteins in pumpkin seeds and the carrot globulin-like protein. This finding suggests that the polypeptide may consist of a 21-amino acid segment as a part of the *signal* *peptide* and the proprotein, which may be converted to two mature proteins, Gly m Bd 28K and a 23-kDa protein, during the development of soybean...

15/3,K/15 (Item 15 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08874599 20160442 PMID: 10694469
Characterization of Pen n 13, a major allergen from the mold Penicillium notatum.
Chow L P; Chiou S H; Hsiao M C; Yu C J; Chiang B L
Institute of Biochemistry, National Taiwan University, Taipei, Taiwan 100, Republic of China.
Biochemical and biophysical research communications (UNITED STATES) Mar 5 2000, 269 (1) p14-20, ISSN 0006-291X Journal Code: 0372516
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... A novel cDNA coding for Pen n 13 was cloned and sequenced. The nucleotide sequence codes for a protein 397 amino acids including a putative *signal* *peptide* of 25 amino acids and a propeptide of 90 amino acids. The *allergen* is an alkaline serine protease that shares more than 39% identical residues with other kinds of mold allergens. The coding cDNA of Pen n 13 was cloned into vector pQE-30 and expressed in E. coli M15 as a His-tag *fusion* protein and purified to homogeneity. The *fusion* protein reacted with monoclonal antibodies of Pen c 1 and with IgE from Penicillium-allergic patients. Furthermore, it also cross-reacted strongly with IgE specific...

15/3,K/16 (Item 16 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08408413 95096428 PMID: 7798547

Characterization of D[redacted] p V allergen, cDNA analysis, [redacted]d IgE-mediated reactivity to the recombinant protein.

Lin K L; Hsieh K H; Thomas W R; Chiang B L; Chua K Y

Graduate Institute of Immunology, National Taiwan University College of Medicine, Taipei, Republic of China.

Journal of allergy and clinical immunology (UNITED STATES) Dec 1994, 94 (6 Pt 1) p989-96, ISSN 0091-6749 Journal Code: 1275002

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... was truncated so it was used to obtain longer clones from a lambda gt10 library. Analysis of the sequence of these clones showed that the *allergen* now designated Der p V is produced from a 132-residue polypeptide, which has a putative 19-residue *leader* *peptide* and a 113-residue mature protein. This would have a molecular weight of 14 kd, corresponding to that found in mite extracts. IgE binding studies with the lambda gt11 clone and a *fusion* of the mature sequence in a pGEX construct showed that it reacted with 50% of allergic sera. Further studies with skin tests indicated that it...

15/3,K/17 (Item 17 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

08020060 94085783 PMID: 8262382

Cloning of a cDNA encoding a group-V (group-IX) allergen isoform from rye-grass pollen that demonstrates specific antigenic immunoreactivity.

Ong E K; Griffith I J; Knox R B; Singh M B

School of Botany, University of Melbourne, Parkville, Vic., Australia.

Gene (NETHERLANDS) Dec 8 1993, 134 (2) p235-40, ISSN 0378-1119 Journal Code: 7706761

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

We have isolated and characterized the cDNA clone, 19R, that encodes an isoform of a major rye-grass *pollen* *allergen*, Lol p V [previously referred to as Lol p 1b; Singh et al., Proc. Natl. Acad. Sci. USA 88 (1991) 1384-1388; and Lol p IX; Suphioglu et al., Lancet 339 (1992) 569-572]. Clone 19R was isolated from a rye-grass *pollen* cDNA expression library using grass *pollen*-specific immunoglobulin E (IgE) antibodies (Ab) from an allergic serum pool. The nucleotide (nt) sequence of clone 19R potentially encodes a 33.8-kDa protein of 339 amino acids (aa). It possesses a *leader* *peptide* essentially identical to the previously characterized isoform of Lol p V (Lol p VA). This indicates a mature processed 31.3-kDa protein of 314 aa, correlating well with the size of the polypeptides revealed by Western analysis of *pollen* proteins using IgE Ab affinity purified from recombinant *fusion* protein (reFP) encoded by clone 19R as solid matrix. There is no N-glycosylation motif. The protein encoded by clone 19R, designated Lol p VB...

15/3,K/18 (Item 18 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07969577 94035138 PMID: 8220442

Isolation of an asparagus intracellular PR gene (AoPR1) wound-responsive promoter by the inverse polymerase chain reaction and its characterization in transgenic tobacco.

Warner S A; Scott R; Draper J

Botany Department, Leicester University, UK.

Plant journal - for cell and molecular biology (ENGLAND) Feb 1993, 3

(2) p191-201, ISSN 096[redacted]412 Journal Code: 9207397
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... and that it was probable that the AoPR1 regulatory sequence had been amplified. To test the AoPR1 cis-acting sequences for biological function a translational *fusion* was constructed with the beta-glucuronidase (GUS) reporter gene and tested in tobacco. These data demonstrated that sequences 982 bp from the probable start of transcription are sufficient to direct wound-inducible transcription and that there is no *signal* *peptide* encoded by the first 31 residues of the predicted AoPR1 protein. Histochemical localization of GUS activity in transgenic tobacco demonstrated strong activity localized to wound and pathogen invasion sites. GUS activity was also found in mature *pollen* grains.

15/3,K/19 (Item 19 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07305018 92167963 PMID: 1311405
Transactivation of Ds by Ac-transposase gene fusions in tobacco.
Rommens C M; van Haaren M J; Buchel A S; Mol J N; van Tunen A J; Nijkamp H J; Hille J
Free University, Department of Genetics, Amsterdam, The Netherlands.
Molecular & general genetics - MGG (GERMANY) Feb 1992, 231 (3) p433-41, ISSN 0026-8925 Journal Code: 0125036
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... plant development. These promoters are the flower-specific chalcone synthase A promoter (CHS A), the anther-specific chalcone isomerase B promoter CHI B and the *pollen*-specific chalcone isomerase A2 promoter CHI A2. The *modified* transposase genes were introduced into a tobacco tester plant. This plant contains Ds stably inserted within the *leader* *sequence* of the hygromycin resistance (HPT II) gene. As confirmed with positive control elements, excision of Ds leads to the restoration of a functional HPT II...
...of transposase gene fusions in calli, excision in regenerated plants was observed only for the CHS A- or CHI B-transposase gene fusions. With these *modified* transposase genes, somatic excision frequencies were increased (68%) and decreased (22%), respectively, compared to the situation with the Ac element itself (38%). The shifts in...

... significant differences in the frequencies of germinally transmitted excision events (approximately 5%). The relative somatic stability of Ds insertions bearing the CHI B-transposase gene *fusion* suggests the usefulness of this activator element for transposon tagging experiments.

15/3,K/20 (Item 20 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06630732 90256302 PMID: 2187817
Expression of Dermatophagoides pteronyssinus allergen, Der p II, in Escherichia coli and the binding studies with human IgE.
Chua K Y; Dilworth R J; Thomas W R
Clinical Immunology Research Unit, Princess Margaret Hospital, Subiaco, Australia.
International archives of allergy and applied immunology (SWITZERLAND) 1990, 91 (2) p124-9, ISSN 0020-5915 Journal Code: 0404561
Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Lambda gt11 clones expressing the major house dust mite *allergen*, Der p II, have been reported to react with IgE in the serum of a high proportion of allergic patients. The clones described, however, only...

... of protein which was not fused to the beta-galactosidase of the vector. A construct of the Der p II is described which produces a *fusion* of Der p II, minus its *leader* *sequence*, with the glutathione-S transferase in the pGEX vector. This could be readily isolated and was shown to react with IgE in 22 of 24...

... of the IgE reactivity of patients to native Der p II. The construct described, therefore, should be valuable for quantitative studies of a pure mite *allergen*.

15/3,K/21 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

05516892 EMBASE No: 1993284991
The Sc7/Sc14 gene family of Schizophyllum commune codes for extracellular proteins specifically expressed during fruit-body formation
Schuren F.H.J.; Asgeirsdottir S.A.; Kothe E.M.; Scheer J.M.J.; Wessels J.G.H.
Department of Plant Biology, Biological Centre, University of Groningen, Kerklaan 30,9751 NN Haren Netherlands
Journal of General Microbiology (J. GEN. MICROBIOL.) (United Kingdom) 1993, 139/9 (2083-2090)
CODEN: JGMIA ISSN: 0022-1287
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...positions, and they are generally hydrophilic. Inspection of databanks showed similarities with pathogenesis-related proteins (PR1) from plants, testis-specific proteins from mammals and venom *allergen* proteins from insects. An antibody raised against a Sc7 *fusion* protein showed the presence of the Sc7 protein in the culture medium and in the fruit bodies where it is apparently loosely associated with hyphal...
DRUG DESCRIPTORS:
allergen; antibody; aromatic amino acid--endogenous compound--ec; hybrid protein; protein--endogenous compound--ec; rabbit antiserum; *signal* *peptide*--endogenous compound--ec; venom
?ds

Set	Items	Description
S1	43865	(SIGNAL OR LEADER) (W) (SEQUENCE OR PEPTIDE)
S2	6420	S1 (S) (HETEROLOGOUS OR DELETION OR MODIFIED OR REPLACED OR DELETED)
S3	0	S2 (S) (HEMAGGLUTININ (W) A)
S4	6	S2 (S) (ALLERGEN)
S5	3	RD (unique items)
S6	6	S2 AND (ALLERGEN)
S7	3	RD (unique items)
S8	0	S7 NOT S5
S9	8	S2 AND (RAGWEED OR POLLEN OR (AMB (W) A1))
S10	3	RD (unique items)
S11	0	(ALLERGEN OR RAGWEED OR POLLEN OR (ANTIGEN (W) E)) (S) (HEMAGGLUTININ (W) A)
S12	0	(ALLERGEN OR RAGWEE OR POLLEN OR (ANTIGEN (W) E)) AND (HEMAGGLUTININ (W) A)
S13	2970	(ALLERGEN OR RAGWEED OR POLLEN OR (ANTIGEN (W) E)) (S) (CHIMERIC OR FUSION OR MODIFIED)
S14	53	S13 AND S1

```
S15          21   RD (unique items)
?logoff
       18jul03 15:33:29 User259876 Session D525.2
            $9.13    2.854 DialUnits File155
               $5.25  25 Type(s) in Format  3
            $5.25  25 Types
     $14.38  Estimated cost File155
            $2.72    0.923 DialUnits File159
      $2.72  Estimated cost File159
           $15.26    2.725 DialUnits File5
               $1.75  1 Type(s) in Format  3
            $1.75  1 Types
     $17.01  Estimated cost File5
           $22.77    2.462 DialUnits File73
               $2.55  1 Type(s) in Format  3
            $2.55  1 Types
     $25.32  Estimated cost File73
            OneSearch, 4 files,  8.964 DialUnits FileOS
      $4.20  TELNET
     $63.63  Estimated cost this search
     $64.01  Estimated total session cost   9.054 DialUnits


### Status: Signed Off. (18 minutes)
```